

# Exhibit 12

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1 UNITED STATES DISTRICT COURT

2 DISTRICT OF NEW JERSEY

3 - - -

4  
5 IN RE: JOHNSON & JOHNSON : MDL NO.

TALCUM POWDER PRODUCTS : 16-2738(MAS)(RLS)

6 MARKETING, SALES :

PRACTICES, AND PRODUCTS :

7 LIABILITY LITIGATION :

8  
9 - - -

10 June 25, 2024

11 - - -

12  
13 Remote oral deposition of MATTHEW  
14 SANCHEZ, Ph.D., conducted at the location of the  
15 witness, commencing at or about 11:09 a.m. on the  
16 above date, before Kathleen A. Zerman, a  
17 Professional Reporter and Notary Public.

18 - - -

19  
20  
21  
22  
23 GOLKOW, a Veritext Division

24 877.370.3377 ph/917.591.5672 fax

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## I N D E X

## WITNESS

PAGE NO.

Matthew Sanchez, Ph.D.

By Mr. Oliver

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NO.

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## DEPOSITION SUPPORT INDEX

DIRECTIONS NOT TO ANSWER:

PAGES: None

REQUESTS FOR DOCUMENTS OR INFORMATION:

PAGES: None

STIPULATIONS AND/OR STATEMENTS:

PAGES: None

MARKED QUESTIONS:

PAGES: None

1                   -   -   -

2                   THE COURT REPORTER: All  
3 parties to this deposition are  
4 appearing remotely and have agreed  
5 to the witness being sworn in  
6 remotely. Due to the nature of  
7 remote reporting, please pause  
8 briefly before speaking to ensure  
9 all parties are heard  
10 completely.

11                   -   -   -

12                   MATTHEW SANCHEZ, Ph.D.,  
13 after having been first duly sworn, was  
14 examined and testified as follows:

15                   -   -   -

16                   MR. OLIVER: This is Lance  
17 Oliver with the Motley Rice law  
18 firm appearing for the plaintiffs  
19 in this litigation, and with me I  
20 have my colleague Mr. Ridge  
21 Mazingo, also appearing for the  
22 plaintiffs in this litigation.

23                   If any other plaintiff's  
24 counsel or defense counsel need to



1           make appearances, you know, feel  
2           free to take this opportunity to  
3           do so.

4                       -   -   -

5                       EXAMINATION

6                       -   -   -

7       BY MR. OLIVER:

8           Q.       All right. Good morning,  
9       Dr. Sanchez. You and I have met before,  
10      correct?

11          A.       I don't remember, but I'll  
12      take -- sorry. I just don't recall  
13      meeting before, but...

14          Q.       That's okay. I was counsel  
15      in a couple of the trials that you  
16      testified in this spring.

17                    Do you remember those  
18      trials?

19          A.       I remember a few trials this  
20      spring, yes.

21          Q.       Okay. You have been deposed  
22      many, many times, fair?

23          A.       I have been deposed over the  
24      past, I think, nine years or so many

1 times, yes.

2 Q. You don't have any need for  
3 me to go over the ground rules of this  
4 deposition, do you?

5 A. I think that's your  
6 decision, not mine. I'm not sure what  
7 you're asking for me there. This is your  
8 record to make, so I think that's up to  
9 you whether you want to cover the ground  
10 rules or not.

11 Q. I just want to make sure  
12 that you understand the typical ground  
13 rules of a deposition. You don't need me  
14 to explain those to you at this point in  
15 your career, do you?

16 MR. HYNES: Objection; form,  
17 vague.

18 THE WITNESS: Yes, it's an  
19 odd question to me. Sorry. I'm  
20 not a trained legal person. I do  
21 not have -- while I've given  
22 depositions, I wouldn't sit here  
23 and say that I know all the ins  
24 and outs of the rules of a

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1 deposition and the questioning  
2 that attorneys are -- would do.

3 So I just -- I'm not an area -- I  
4 can't answer that question.

5 BY MR. OLIVER:

6 Q. Okay. Let me just go over a  
7 couple of ground rules with you and we'll  
8 jump right into it after that since I  
9 don't want there to be any confusion.

10 First of all, you understand  
11 you've taken an oath in this case,  
12 correct?

13 A. Correct.

14 Q. You understand that the oath  
15 you've taken is the same as an oath you  
16 would take in court in front of a jury,  
17 true?

18 A. I understand that, yes.

19 Q. And you understand you're  
20 obligated to tell the whole truth and  
21 nothing but the truth, correct?

22 A. I understand that.

23 Q. Are you aware of any reason  
24 that you cannot tell the full and

1 complete truth today? For example,  
2 you're not taking any medication that  
3 would hinder your ability to remember or  
4 tell the truth, are you?

5 A. I am not.

6 Q. Is there any other reason  
7 sitting here today that would hinder your  
8 ability to tell the full and complete  
9 truth?

10 A. No.

11 Q. You understand, given your  
12 experience, that a court reporter, Ms.  
13 Zerman, is taking down everything that  
14 you and I say, correct?

15 A. While on the record, yes.

16 Q. Yes, while on the record.

17 Because of that, you  
18 understand that you must answer questions  
19 audibly with yes or no or some audible  
20 answer, right?

21 A. I do understand that, yes.

22 Q. You know that that's because  
23 the court reporter cannot record  
24 accurately a head nod or a colloquial

1 phrase such as uh-huh, right?

2 You understand that's the  
3 reason for that, right?

4 A. Again, I can't go into the  
5 reasons, but yes, my understanding is I  
6 need to have verbal responses.

7 Q. You understand that  
8 periodically counsel for Johnson &  
9 Johnson, who's Mr. Hynes, may lodge an  
10 objection, right?

11 A. Yes.

12 Q. You understand that even  
13 though -- well, strike that.

14 We can agree that even  
15 though Mr. Hynes may lodge an objection,  
16 unless for some reason he instructs you  
17 not to answer, you know that you must  
18 still answer my question, right?

19 A. Yes, I know that.

20 Q. Can we agree that even  
21 though Mr. Hynes lodges an objection, you  
22 will still endeavor to answer my question  
23 to the best of your ability?

24 A. Depending on the nature of

1 the question and any instruction, but  
2 yes.

3 Q. Well, I sort of need --  
4 because those are the rules of the road  
5 and you've expressed some confusion, I do  
6 need an unequivocal yes or no.

7 Unless Mr. Hynes instructs  
8 you not to answer, can you agree that you  
9 will answer my question to the best of  
10 your ability regardless of any objection  
11 that is lodged?

12 MR. HYNES: Asked and  
13 answered.

14 THE WITNESS: I think my  
15 answer was yes previously, sir.

16 BY MR. OLIVER:

17 Q. Sometimes I am going to ask  
18 a bad question, one that is confusing.  
19 Do you understand that it is your  
20 obligation as a witness if you're  
21 confused by a question to ask me to  
22 clarify?

23 A. I do.

24 Q. Can we agree that if you're

1 confused or do not understand one of my  
2 questions, you will ask for such  
3 clarification?

4 A. Yes, I will.

5 Q. You understand that if you  
6 don't ask for such clarification, your  
7 answers given will stand on the record?

8 A. I understand that.

9 Q. You also understand that if  
10 at any time you need a break to go to the  
11 bathroom or something like that, you can  
12 just ask and we'll take a break.

13 Fair enough?

14 A. I understand that as well.

15 Q. Okay. Now, there's one  
16 exception to that rule. You may not take  
17 a break while a question is pending.

18 Do you understand that?

19 A. I do.

20 Q. Okay. Will you agree with  
21 me that if a question is pending and you  
22 need to take a break for any reason, you  
23 will answer the question first and then  
24 you will ask for a break after the

1 question has been answered?

2 A. Yes.

3 Q. Okay. You understand that  
4 you're testifying in a multi-district  
5 litigation that is pending in New Jersey  
6 involving the claims of women who have  
7 used Johnson's baby powder on their  
8 genitals, correct?

9 A. I have a general  
10 understanding of that, yes.

11 Q. You understand that women in  
12 these cases claim that over the years,  
13 they used the product repeatedly and they  
14 allege that caused them to develop  
15 ovarian cancer.

16 Fair enough?

17 A. That's my general  
18 understanding.

19 Q. You're not a medical doctor,  
20 right?

21 A. That's correct.

22 Q. And you don't plan to  
23 express the opinion in this case about  
24 the connection medically between asbestos



1 and ovarian cancer, do you?

2 A. Correct.

3 Q. You don't plan to express  
4 any opinion in your testimony in this  
5 case about the connection between talcum  
6 powder use on your genitals and ovarian  
7 cancer, true?

8 A. That's correct.

9 Q. And your answer is the same  
10 regardless of the type of asbestos  
11 involved, right?

12 A. Correct.

13 Q. You're simply not a medical  
14 witness who will offer medical opinions?

15 A. Correct.

16 Q. You would defer to medical  
17 professionals for those types of -- for  
18 that type of testimony?

19 A. It's beyond my role in the  
20 litigation, so I'm not going into those  
21 issues.

22 Q. And you're not -- just so to  
23 be clear, you're not going into those  
24 issues because you don't possess that

1 type of educational or experiential  
2 expertise, fair?

3 A. That's correct, that is not  
4 what I'm an expert in.

5 Q. Sir, you understand that  
6 your attorneys have produced a large  
7 volume of documents that we may see some  
8 of in this deposition. They produced  
9 them before this deposition, right?

10 A. That's my understanding.

11 Q. You agree that all of the  
12 documents the attorneys produced are  
13 documents that you have either reviewed  
14 or relied on in forming your opinions?

15 A. Yes. Reviewed and/or  
16 relied, yes.

17 Q. And to the extent that I or  
18 anybody else has questions about those  
19 documents, you are prepared to answer  
20 questions about them either in this  
21 deposition or under oath in court?

22 A. Yes, assuming that I'm  
23 provided the document and can refresh my  
24 memory of it, but yes.

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1           Q.       Of course. Of course. I'm  
2       not asking you for a memory test.

3           MR. OLIVER: So Madam Court  
4       Reporter, can we mark as Exhibit  
5       1 -- and I'll just call this a  
6       nominal exhibit. I am going to  
7       mark as Exhibit 1 the  
8       pre-deposition production by  
9       defendants of Dr. Sanchez's  
10      materials considered and reliance  
11      materials. Okay?

12           And we will send you that in  
13      a separate form later on. Is that  
14      okay, Ms. Zerman?

15           THE COURT REPORTER: Yes.

16      BY MR. OLIVER:

17           Q.       Dr. Sanchez, do you  
18      understand that in this deposition, the  
19      plaintiffs also issued a subpoena to the  
20      law firm King & Spalding representing  
21      Johnson & Johnson for some additional  
22      materials?

23           Did you know that?

24           A.       Not the specifics, but I

1 know there were multiple productions  
2 based upon plaintiff requests, but I  
3 don't know the nature of the requests.

4 MR. OLIVER: Okay. And this  
5 is more or less for the record and  
6 for the lawyers. I'll represent  
7 that we issued a subpoena and --  
8 we the plaintiffs, and that  
9 subpoena was responded to I  
10 believe late last night or maybe  
11 yesterday at some point; is that  
12 right, Katy?

13 I'm sorry, it was Friday.

14 So I would like to mark as  
15 Exhibit 2, nominal Exhibit 2,  
16 Madam Court Reporter, all of the  
17 documents that were produced in  
18 response to the subpoena.

19 BY MR. OLIVER:

20 Q. And, Dr. Sanchez, I'm not  
21 going to ask you, you know, about a  
22 document that you don't have access to.  
23 I simply want it clear for the record  
24 when my colleagues later use this

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1 deposition, we put all those documents on  
2 the record and that they're documents you  
3 have seen and/or relied on; is that fair?

4 A. Assuming those are materials  
5 that I have seen and relied upon, yes,  
6 that is fair.

7 Q. Okay. Dr. Sanchez, you  
8 received an envelope of exhibits that  
9 we're going to use in this deposition  
10 from us, correct?

11 A. Yes. I picked it up  
12 yesterday.

13 Q. And that envelope had some  
14 instructions to not open or look at those  
15 exhibits until the deposition, right?

16 A. I didn't see instructions,  
17 but I have not opened it yet.

18 Q. Okay. Why don't you go  
19 ahead -- I'm going to begin by going  
20 through some of these documents. Why  
21 don't you go ahead and open that material  
22 so we can look at the first exhibit.

23 Okay. Dr. Sanchez, if  
24 you'll pull out -- your first folder

Page 21

1       should be labeled Sanchez, Matthew S.  
2       Testimony 052724.

3                   Do you see that?

4           A.       I do.

5           Q.       Okay. This is a list of the  
6       deposition and trial testimony that you  
7       have given over your career as an expert  
8       witness, correct?

9           A.       Yes.

10                   MR. OLIVER: Madam Court  
11       Reporter, we will mark this as  
12       Exhibit 3 to Dr. Sanchez's  
13       deposition.

14       BY MR. OLIVER:

15           Q.       Dr. Sanchez, take a moment  
16       to review this. Can you confirm that  
17       this is a complete and accurate list of  
18       every case in which you've ever testified  
19       since 2014?

20           A.       I believe it is. The last  
21       entry here is from the end of May. I  
22       don't recollect whether or not I had any  
23       depositions this month, meaning the month  
24       of June, but it -- this appears accurate

1 to me.

2 Q. Okay. And just to be clear,  
3 I believe I know the answer to this, but  
4 you did actually do expert testimony  
5 prior to November of 2014, didn't you?

6 A. No, I did not.

7 Q. Okay. So this is a complete  
8 list of all of your testimony as far as  
9 you're aware?

10 A. Yes. And I should note then  
11 under that question, that that first  
12 case, the Antonio Perez case was -- I was  
13 being deposed as a fact witness based on  
14 work that I had performed in that case.  
15 The first case I ever did as an expert  
16 was in 2016.

17 Q. Okay. Fair enough.

18 I went through the document  
19 and counted the number of times that you  
20 had testified for Johnson & Johnson, and  
21 I believe that the number is  
22 approximately 48 times.

23 Does that sound right to  
24 you?

1           A.       How -- no, it does not.   How  
2   did you determine whether a case was  
3   Johnson & Johnson or not?

4           Q.       I think we were looking at  
5   the caption.

6                   Can you explain to me what  
7   your understanding of how many times you  
8   testified on behalf of Johnson & Johnson  
9   is?

10          A.       I don't have an  
11   understanding, but if you were going  
12   simply by the caption as -- for example,  
13   on the previous -- well, just the top  
14   entry on this page here, page 3, Tina  
15   Herford and Douglas Herford versus AT&T  
16   Corp, et al., my recollection is that was  
17   the first Johnson & Johnson case I  
18   testified at.

19          Q.       Okay.

20          A.       Her name is part of the et  
21   al in the case name, so I think the  
22   number would be higher than what you said  
23   if that was -- if that's how you tallied  
24   that number.



1           Q.     Okay. So I counted 48 case  
2     captions with Johnson & Johnson in the  
3     case name, and you've made a good point.  
4     The number is actually higher than 48  
5     because some of the case names or  
6     captions simply don't include Johnson &  
7     Johnson, right?

8           A.     As -- as displayed here,  
9     correct.

10          Q.     Okay. Do you know how many  
11     times you testified as an expert witness  
12     on behalf of Johnson & Johnson?

13          A.     I have not made -- I have  
14     not done that, no.

15          Q.     You agree that that number  
16     is knowable, right?

17          A.     It's more than 48 I would  
18     say, but I don't know what you mean by  
19     notable.

20          Q.     I'm sorry. I said knowable,  
21     not notable.

22          A.     Sorry. It could be  
23     knowable, yes. I'd have to go in and  
24     check each of these cases with -- and

1 cross-reference the full case names with  
2 Johnson & Johnson, and then also check  
3 whether or not I was retained by Johnson  
4 & Johnson in those cases.

5 Q. Okay. Well, there's no need  
6 for you to do that now. We'll go back  
7 and look at those cases.

8 Needless to say, that the  
9 number of times you've testified in a  
10 case on behalf of Johnson & Johnson in  
11 your estimation is closer to 60 cases,  
12 fair?

13 A. I don't know the number.  
14 The -- I would say fairly that most of  
15 the depositions that I have given have  
16 been on behalf of Johnson & Johnson.

17 Q. Okay. All of the cases in  
18 which you have been retained and  
19 testified were taken by and testified on  
20 behalf of Johnson & Johnson involve  
21 allegations regarding a talcum powder  
22 product such as Johnson's baby powder,  
23 correct?

24 A. Yes.

1           Q.       And each of those cases  
2 involves an allegation that the talcum  
3 powder product from Johnson & Johnson was  
4 contaminated at some point with asbestos,  
5 true?

6           A.       The vast majority. I do  
7 remember one case I testified in at trial  
8 in Philadelphia where the plaintiffs were  
9 not alleging asbestos contamination in an  
10 ovarian case, but that's the only one  
11 that I can remember.

12           Q.       Otherwise, all of the cases  
13 involving Johnson & Johnson have -- have  
14 contained an allegation that there was  
15 asbestos contamination in the talcum  
16 powder product, true?

17           A.       I believe that's accurate,  
18 at least the ones that I've dealt with.

19           Q.       And in each of the cases  
20 that you have testified in on behalf of  
21 Johnson & Johnson, you have given an  
22 opinion that the talc used by Johnson &  
23 Johnson was not contaminated with  
24 asbestos, right?

1           A.       Well, I defer to my specific  
2 testimony, but generally, yes.

3           Q.       So your opinion more or less  
4 is the same every time. There -- one of  
5 your opinions is there's no asbestos in  
6 Johnson's baby powder, correct?

7                   MR. HYNES:   Objection to  
8 form.

9                   THE WITNESS:   I would defer  
10 to my specific testimony, but in  
11 my own -- in my own testing of  
12 Johnson & Johnson baby powders  
13 that have come out through the  
14 litigations, there's only one of  
15 those samples wherein I found any  
16 asbestos. So again, I would just  
17 defer to my actual reports and  
18 what I've actually done and say.

19 BY MR. OLIVER:

20           Q.       And I understand you saying  
21 I defer to my reports, but I just want to  
22 be clear. Your report in all of these  
23 cases says the same thing, and that thing  
24 is that Johnson's baby powder is not

1       contaminated with asbestos based on your  
2       work, right?

3               A.       Correct.

4               Q.       You also say that the mines  
5       that Johnson & Johnson used to source its  
6       talc for talcum powder products were not  
7       contaminated with asbestos; is that fair?

8               A.       Yes, dealing with the actual  
9       ores and then the testing of the ores  
10      show that same record. The testing of  
11      the final products by the company show  
12      that same record as do my own testing of  
13      the bottles.

14              Q.       You have also and I --  
15      because of the issue with the case  
16      captions and your case list, we may have  
17      to have some clarification, but am I  
18      correct that you have testified in some  
19      cases in which -- some talcum powder  
20      related cases in which Johnson & Johnson  
21      was not the defendant?

22              A.       Yes.

23              Q.       Okay. The American Talc  
24      Company is one of the defendants in some

1 of your cases. Did you testify in those  
2 cases on behalf of the American Talc  
3 Company?

4 A. No.

5 Q. Who did you testify on  
6 behalf of in those cases?

7 A. Do you have a specific case  
8 that I -- to see if I can remember?

9 Q. Sure. The first one on the  
10 list is Alfaro versus the American Talc  
11 Company. It could be that that's another  
12 Johnson & Johnson case. I just don't  
13 know.

14 A. No, the Alfaro case was a  
15 Colgate Palmolive case, a Cashmere  
16 Bouquet product.

17 Q. Okay. So you have testified  
18 in a series of cases on behalf of Colgate  
19 Palmolive who made a talcum powder  
20 product called American Bouquet, correct?

21 A. I think you have the name  
22 wrong. The product name was Cashmere  
23 Bouquet.

24 Q. Oh, okay. I'm sorry. What

1 did I call it?

2 A. It wasn't that. I'm not  
3 sure exactly what you said.

4 Q. Cashmere Bouquet. Okay.  
5 So in those cases, you were  
6 retained by the Colgate Palmolive  
7 company, correct?

8 A. Yes.

9 Q. And in those cases, the  
10 product, Cashmere Bouquet, was also  
11 another talcum powder, body powder  
12 product, right?

13 A. Yes.

14 Q. It's very much like  
15 Johnson's baby powder except that it is  
16 an adult product primarily directed at  
17 women to use in a hygienic fashion.

18 Is that a fair statement?

19 A. Well, they use -- they had  
20 talc from different places and not the  
21 same processing and things, but it was  
22 a -- Cashmere Bouquet is a talcum, like a  
23 loose powder product.

24 Q. Right. And you made a good

1 point.

2 The talc that was in  
3 Cashmere Bouquet came from different  
4 mines than Johnson & Johnson used, right?

5 A. For some years and some  
6 instances, yes.

7 Q. Okay. And the talc that  
8 Colgate Palmolive used for Cashmere  
9 Bouquet was also processed in certain  
10 years in a different way than Johnson's  
11 baby powder?

12 A. Again, it would depend on  
13 the years and the mine source how things  
14 were being processed. So I'm just -- I  
15 don't want to draw too many correlations  
16 that may lead to some false impressions.

17 Q. Okay. Regardless, in the  
18 Colgate Palmolive cases, you testified  
19 that the product was not -- the product  
20 Cashmere Bouquet was not contaminated  
21 with asbestos; is that true?

22 A. Based on my work and the  
23 testing I have done of Cashmere Bouquet  
24 bottles, that's correct.



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1 Q. Okay. Now, did you ever  
2 testify on behalf of the Avon company?

3 A. No.

4 Q. Okay. There are some cases  
5 with the Avon company listed in your list  
6 of testimony and I'm wondering if those  
7 are just Johnson & Johnson cases.

8 Is that what you recall?

9 MR. HYNES: Overbroad.

10 THE WITNESS: I don't have a  
11 good memory of other defendants in  
12 cases that I was not working for.

13 BY MR. OLIVER:

14 Q. Let me help you out. If you  
15 turn to page 2 of your deposition and  
16 trial testimony, at the bottom there's a  
17 Susan E. Jenkins versus Avon Products,  
18 Incorporated. That's in the Superior  
19 Court of California.

20 Do you know which defendant  
21 you were retained by in that case?

22 A. No, the name doesn't bring  
23 up any memory for me. I'd have to look.

24 Q. Okay. Other than Colgate

1       Palmolive and Johnson & Johnson, what  
2       other defendant has retained you in  
3       talc-related litigation?

4               A.       I've given depositions for a  
5       few different clients other than those.  
6       Colgate Palmolive also has a Mennen  
7       product or products that are talc based  
8       that I have done work.

9               Q.       Okay.

10              A.       I have done for Este Lauder  
11       and given depositions. I've also done  
12       some work for a company called Block Drug  
13       Company that for a short period of time  
14       manufactured a Gold Bond product.

15              Q.       Okay. Any others that you  
16       recall?

17              A.       There might be some others,  
18       but those are the ones that come to mind  
19       readily.

20              Q.       Okay. The Mennen product,  
21       was that a body powder, a talc-based body  
22       powder?

23              A.       There's a few products that  
24       have come up. There's been a shave talc

1 and I think there has been a body powder  
2 as well.

3 Q. And the Mennen products that  
4 you testified about were not sourced from  
5 the same mines as Cashmere Bouquet or  
6 Johnson's baby powder, were they?

7 A. No, there's some  
8 similarities in sources based on time  
9 frames, but again, every -- every -- it  
10 seems like every company isn't doing the  
11 same exact thing as far as sourcing. So  
12 we'd have to look at what specific years  
13 or product to line up what -- what was  
14 the talc source and talc -- and those  
15 things to be able to answer that question  
16 intelligently.

17 Q. And let me help you answer  
18 it intelligently.

19 The sources of the Mennen  
20 products, the mining sources of the talc  
21 for Mennen products were not identical  
22 over the years to the sources for  
23 Johnson's baby powder, right?

24 A. No, there may have been

1 periods where they both may have been  
2 using like an Italian sourced talc, but  
3 other than that, no, but you can't --  
4 they're not identical throughout --  
5 through all time, no.

6 Q. Okay. And the processing  
7 that the Mennen company used to create  
8 their final product was not identical to  
9 the processing or beneficiation that  
10 Johnson used for its baby powder, right?

11 A. No. They deal with  
12 different mine -- mine sources and  
13 things. They're doing different  
14 processing, different -- different  
15 things. So they would -- they would  
16 not -- you would not be able to treat  
17 them equivalent from a scientific  
18 perspective.

19 Q. And your opinion in the  
20 Mennen cases was that the talc-based  
21 powders you testified about did not have  
22 asbestos contamination, correct?

23 A. Based on testing of actual  
24 products and things as well as reviewing

1 records, yes.

2 Q. Did you also testify in the  
3 Mennen cases that their mine sources for  
4 talc did not have asbestos contamination?

5 A. Those -- the particular  
6 mines that have been identified to me,  
7 that would be my testimony, yes.

8 Q. Okay. In the Este Lauder  
9 case, the -- what product was at issue in  
10 the Este Lauder case?

11 A. I don't recall the names as  
12 I sit here today.

13 Q. Were they body powders?

14 A. There was one body powder,  
15 the name just came to me, named Youth  
16 Dew, I believe, but there were some --  
17 there were some other products as well  
18 that I've tested, but I don't recall  
19 their names.

20 Q. The sources of the talc that  
21 Este Lauder used to create its powder  
22 products were not identical over the  
23 years to the sources for Johnson's baby  
24 powder, right?

1 A. They would not be.

2 Q. You testified in the Este  
3 Lauder cases that their product did not  
4 have asbestos contamination, correct?

5 A. As far as I can determine,  
6 that's correct.

7 Q. You also testified in the  
8 Este Lauder cases that the mine sources  
9 for their talc were not contaminated with  
10 asbestos, correct?

11 A. To the best of my knowledge,  
12 the mine sources used at various times,  
13 there's no evidence that they -- you  
14 could assume that they would be  
15 contaminated, so that that would be  
16 correct, and also looking at the actual  
17 testing of some of the products.

18 Q. The cases that you testified  
19 on behalf of for Block Drug Company you  
20 said were Gold Bond cases, right?

21 A. That is the product that  
22 they manufactured for a short period of  
23 time, yes.

24 Q. And Gold Bond is a foot and

1 body powder as well, correct?

2 A. It is a talcum powder  
3 product. Used to be, yes.

4 Q. The sources -- you said it  
5 used to be. It used to be because the  
6 makers of Gold Bond no longer use talc in  
7 their powder, right?

8 A. I don't -- I believe that's  
9 accurate, but again, I have no -- I only  
10 see what I see in the store that it says  
11 it's now a cornstarch product is the  
12 stuff you buy today.

13 Q. Okay. The sources for the  
14 talc in the Block Drug Company cases were  
15 not identical over the years to the  
16 sources for Johnson's baby powder, right?

17 A. Correct.

18 Q. And the beneficiation  
19 process that the Block Drug Company used  
20 to produce Gold Bond powder was not  
21 identical over the years to the process  
22 that Johnson & Johnson used to create  
23 baby powder, correct?

24 A. Again, they are using

1 different mine sources and some other  
2 details that are specific to each  
3 company. So no, no company has an  
4 equivalent usage and source history that  
5 I know of.

6 Q. And nonetheless, you  
7 testified that the Gold Bond products  
8 were not contaminated with asbestos,  
9 right?

10 A. There's not evidence for the  
11 years that I've looked at that you could  
12 make that assertion scientifically.

13 Q. And you testified as well in  
14 the Gold Bond cases that the mine sources  
15 that Block Drug Company used were not in  
16 the relevant years contaminated with  
17 asbestos, correct?

18 A. There was not evidence to be  
19 able to make such a statement, correct.

20 Q. Now, despite your testimony  
21 in these cases, you do agree, because it  
22 is a geological fact, that talc mines can  
23 be contaminated with asbestiform  
24 minerals, true?



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1 MR. HYNES: Overbroad,  
2 vague.

3 THE WITNESS: Depending on  
4 the talc mines and the specifics,  
5 that is true. And I have  
6 testified based on work that I  
7 have done of testing talc and  
8 finding asbestos in it from some  
9 mines. So -- but again, it  
10 depends on the mine. It depends  
11 on how the ore is being processed  
12 and how those minerals are being  
13 monitored. It's more -- it's more  
14 complex than your question  
15 suggested.

16 BY MR. OLIVER:

17 Q. You would agree that talc  
18 and asbestos are naturally -- and  
19 asbestiform minerals are naturally  
20 present alongside one another in the  
21 earth, right? They can occur alongside  
22 one another in the earth?

23 MR. HYNES: Same objection;  
24 overbroad, vague.

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1                   THE WITNESS: Depending on  
2                   the specific localities and the  
3                   localized formation conditions or  
4                   geologic conditions, that can  
5                   happen, but it doesn't mean that  
6                   it always happens nor does it mean  
7                   that it happens all the time. So  
8                   again, you need to look at the  
9                   specifics. I've testified to this  
10                  at length in the past, but the  
11                  formation of asbestiform minerals  
12                  is also more restrictive than the  
13                  formation of simple amphibole  
14                  and/or serpentine group minerals.  
15                  You need to have all of the  
16                  formation conditions met in order  
17                  to form an asbestiform mineral in  
18                  the presence of a talc mine.

19       BY MR. OLIVER:

20                  Q.       And, Dr. Sanchez, I'm  
21                  just -- I'm just trying to get a clean  
22                  answer here.

23                                You agree that talc and  
24                  asbestos can form alongside one another

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1 naturally, right? It happens?

2 I'm not asking you how often  
3 it happens, but you agree that it  
4 happens, correct?

5 MR. HYNES: Again, same  
6 objection.

7 THE WITNESS: I defer to my  
8 previous answer. I was answering  
9 your question.

10 It can happen, but it only  
11 happens under -- under specific  
12 conditions, and depending upon the  
13 actual mine sources and where  
14 you're mining within a mine source  
15 dictates whether or not that --  
16 that -- that does occur.

17 BY MR. OLIVER:

18 Q. You agree that talc-based  
19 products such as body powders, like  
20 Johnson's baby powder, can ultimately be  
21 contaminated with asbestos, right? That  
22 can happen?

23 MR. HYNES: Same objection;  
24 overbroad, vague.

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1                   THE WITNESS: I mean, it's  
2                   an interesting question. I don't  
3                   mean to make comment on your  
4                   question, but I have looked into  
5                   did it happen and the answer is  
6                   no, there's no evidence that it  
7                   did happen. The fact that it  
8                   would happen is pure conjecture on  
9                   my part and your part. A lot of  
10                  things potentially could happen,  
11                  you know, but I've actually gone  
12                  through and tried to answer the  
13                  question did it happen, is  
14                  there -- is there a basis for  
15                  this, and there's not.

16               BY MR. OLIVER:

17                   Q.       So your testimony under oath  
18                   today is that in your experience, it has  
19                   never happened that a talc-based body  
20                   powder product is contaminated with  
21                   asbestos based on your experience?

22                   MR. HYNES: Objection;  
23                   misstates testimony,  
24                   argumentative.

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1 THE WITNESS: Again, you --

2 I defer to my previous answer.

3 That is not what I said.

4 BY MR. OLIVER:

5 Q. Let me ask my question

6 again.

7 You agree with me, Dr.

8 Sanchez, that -- well, let me just do

9 this. Strike that.

10 You yourself have found

11 asbestos in a historical container of

12 Johnson's baby powder, correct?

13 A. From talc drum from a

14 historical container, yes. I don't know

15 the ultimate source of that talc nor

16 whether or not that talc is

17 representative of that time frame in

18 World War II, but yes, materially I -- we

19 removed from that container or I should

20 say it was removed by Dr. Longo, and we

21 received a split of that material did

22 contain tremolite asbestos, as I

23 published in the literature and testified

24 about now for over six years.

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1 Q. Okay. So it was in a bottle  
2 of Johnson's baby powder as far as you  
3 know, right?

4 I mean, that was the  
5 container it was in, true?

6 A. From World War II, yes.

7 Q. And it had talcum powder in  
8 it, correct?

9 A. There was talc, the mineral  
10 talc in that material, yes.

11 Q. And you drew that powder out  
12 and you confirmed the presence of  
13 asbestos, correct?

14 A. No. As I just -- just to be  
15 accurate, Dr. Longo created the split for  
16 us to take. I did not draw the material  
17 out myself.

18 Q. You tested the split that he  
19 gave you and you confirmed the presence  
20 of asbestos, true?

21 A. In that single bottle, yes,  
22 we did find tremolite asbestos from that  
23 time frame.

24 Q. So based on that, you agree

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1       that one way or the other it's possible  
2       that talc-based body powders can become  
3       contaminated with asbestos, right?

4               MR. HYNES:   Overbroad,  
5       vague.

6               THE WITNESS:   Too broad.  
7       Again, it depends on where the  
8       talc is coming from, how the talc  
9       was being processed at the mine  
10      site, sources and whether or not  
11      there's actually asbestos in it.

12              Depending on where it's  
13      coming from, you can find talcum  
14      powders, whether for industrial or  
15      potentially for cosmetic uses at  
16      different -- at historical points  
17      in time that might contain  
18      something, but again, you need to  
19      go beyond just the conjecture that  
20      this is possible and actually test  
21      it out to know.

22      BY MR. OLIVER:

23              Q.       Well -- and that's my point,  
24      Dr. Sanchez.   You did test it out, and

1       when you tested it out in that World War  
2       II era bottle, you -- World War II era  
3       split, you found asbestos, right?

4               A.       Correct, but that bottle,  
5       even if the material in it is accurately  
6       or correctly Johnson & Johnson's baby  
7       powder at that time is not -- is not an  
8       Italian sourced talc nor is it a Vermont  
9       sourced talc nor is it a Guangxi, China,  
10      sourced talc.

11              Q.       And that's fine. I didn't  
12      ask you any of those questions, and I  
13      don't disagree with you.

14                    You would agree with me, Dr.  
15      Sanchez, that as a matter of pure logic,  
16      the most likely way for a talc-based body  
17      powder to become contaminated with  
18      asbestos is from the mine where the talc  
19      was extracted?

20                   MR. HYNES:   Overbroad,  
21                   vague.

22                   THE WITNESS:   The only  
23                   contamination that would matter  
24                   would be from the mine. Any other



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1 source of contamination would have  
2 nothing to do with the talc if it  
3 got introduced at another state.  
4 So if you're asking the question  
5 whether or not the talc itself was  
6 contaminated, you have to go back  
7 to the mine source would be the  
8 relevant source for that.

9 BY MR. OLIVER:

10 Q. Your testimony today is that  
11 none of -- you have never found, with the  
12 exception of the World War II era model,  
13 your testimony today is that none of the  
14 products made by the companies that have  
15 hired you have ever had asbestos  
16 contamination to your knowledge.

17 Is that -- is that your  
18 testimony?

19 MR. HYNES: Overbroad.

20 THE WITNESS: I wouldn't  
21 characterize it that way, so I  
22 can't agree with it.

23 BY MR. OLIVER:

24 Q. How would you characterize

1       it?

2               A.       Based on the work that I've  
3       done looking at the literature regarding  
4       source mines that have been identified  
5       for companies that I've worked for as  
6       well as actually testing product, or at  
7       least alleged product, that was  
8       manufactured by those companies at  
9       different time frames, in testing those  
10      materials, I have -- I have not found  
11      evidence of asbestos contamination.  
12      Therefore, I cannot scientifically  
13      conclude that there's -- there is  
14      asbestos contamination.

15               Further to that point, as  
16      I've looked at the data generated by  
17      plaintiff experts in these cases of their  
18      own testing of the -- in most cases the  
19      same bottles that I have tested, they  
20      have all -- they have deviated from  
21      methodologies. They have not followed  
22      the methodologies or they've created  
23      novel methodologies in order to identify  
24      what they claim is asbestos when it is

1 not.

2 Q. And let's just set aside,  
3 Dr. Sanchez, the disagreement you have  
4 with plaintiffs' experts. I understand  
5 that. That wasn't my question.

6 My question is pretty  
7 simple. Based on your work, your own  
8 testimony is that asbestos contamination  
9 has never happened in the body powder  
10 products for the companies that you have  
11 represented?

12 That's never happened to  
13 your knowledge for your companies, right?

14 MR. HYNES: Argumentative,  
15 asked and answered.

16 THE WITNESS: Again, I've  
17 answered your question under --  
18 under my understanding. You're --  
19 you keep speaking in these  
20 absolutes based upon knowledge  
21 that I have -- I can't have that  
22 level of knowledge. So that is  
23 not -- I have not testified to  
24 that as you just phrased your

1 question.

2 Based on the evidence I have  
3 and the evidence I'm able to  
4 review as a scientist, I have not  
5 seen evidence, I've not seen data  
6 that supports the allegation put  
7 forward that these -- these  
8 products are contaminated with  
9 asbestos.

10 BY MR. OLIVER:

11 Q. So you -- because you said I  
12 can't have that level of knowledge and  
13 because I stated in my question an  
14 absolute, what I understand you to say  
15 is, look, I can't rule out the  
16 possibility that it's happened in some  
17 context that -- where I haven't looked at  
18 the product; is that fair?

19 A. You're not thinking -- that  
20 question is not scientific. All I -- as  
21 a scientist, I have to look at the  
22 evidence that I have, evaluate that data  
23 and then draw reasonable conclusions from  
24 that data. I am not God. I do not have

1 absolute knowledge of anything and your  
2 questions are framing things in  
3 absolutism. That is not a scientific  
4 process to speak in absolutism.

5 Based on the evidence I  
6 have, evidence I reviewed, there's not  
7 evidence to support that Johnson &  
8 Johnson baby powders are contaminated  
9 with asbestos.

10 Q. Let's look at the second  
11 exhibit. You can put away your  
12 deposition and trial testimony, Dr.  
13 Sanchez, and go with me to the second  
14 folder which should be your CV. Yeah,  
15 we're going to mark it.

16 MR. OLIVER: I'm sorry.

17 Madam Court Reporter, I may have  
18 misspoken. We're going to mark  
19 this as Exhibit 4. I said  
20 something else.

21 BY MR. OLIVER:

22 Q. Dr. Sanchez, we're marking  
23 as Plaintiffs' Exhibit 4 your curriculum  
24 vitae.

1 Do you recognize this  
2 document?

3 A. I do.

4 Q. Is it your most up-to-date  
5 CV as far as you can tell?

6 A. Yes, it is.

7 Q. Okay. You agree that it has  
8 no medical training listed in your CV?

9 MR. HYNES: Asked and  
10 answered.

11 THE WITNESS: That's  
12 correct.

13 BY MR. OLIVER:

14 Q. Now, you do have some -- you  
15 have some publications in here, but none  
16 of the publications you've authored have  
17 anything to do with the health effects of  
18 asbestos, right?

19 A. No. I'm not a medical  
20 doctor, as we've covered earlier.

21 Q. And you don't have any  
22 section in this CV about, like, awards or  
23 honors, do you?

24 A. No, I don't have a section

1       like that in here.

2               Q.       Okay. Am I correct that you  
3       never received any awards or honors for  
4       your work related to asbestos?

5               A.       That's incorrect.

6               Q.       What awards and honors have  
7       you received for your work related to  
8       asbestos?

9               A.       I received an award from the  
10       United States Pharmacopeia for my work on  
11       the expert panel a few years ago which  
12       dealt with the detection of asbestos in  
13       talc. As it relates to asbestos, that  
14       would be it, but...

15              Q.       Okay. So that's the only --  
16       that's the only award that you have  
17       received relating to your work on  
18       asbestos as far as you recall?

19              A.       I think that's accurate,  
20       yes.

21              Q.       Okay. Now, you did work on  
22       the U.S. Pharmacopeia, correct?

23              A.       Yes.

24              Q.       And you did that work

1 through your company that you've been  
2 employed by, RJ Lee, right?

3 A. I don't know what you mean  
4 by that.

5 Q. Well, at the time that you  
6 worked with the U.S. Pharmacopeia, you  
7 were employed with RJ Lee, true?

8 A. That's correct.

9 Q. The opportunity to work on  
10 the U.S. Pharmacopeia came through your  
11 employer RJ Lee, fair?

12 A. No, that's inaccurate. That  
13 was not a criteria of acceptance onto the  
14 panel.

15 Q. I didn't -- let me just cut  
16 you off, and I'm not cutting you off to  
17 be rude. I just -- you misunderstood my  
18 question. I didn't ask you about  
19 criteria of acceptance.

20 A. No.

21 Q. How did you learn about the  
22 opportunity to be part of the U.S.  
23 Pharmacopeia work?

24 A. It wasn't through -- it



1       wasn't through the RJ Lee Group. Again,  
2       I'm part of a panel of people that work  
3       for various companies, different  
4       government agencies that are part of that  
5       panel as we do the work. I was not told  
6       by RJ Lee Group. I was not informed by  
7       RJ Lee Group to apply to it. I did that  
8       on my own.

9               Q.       Who told you about the  
10       opportunity?

11              A.       I learned about it from  
12       being up to speed on the -- on the  
13       literature. I knew that there had been a  
14       previous panel convened back -- I think  
15       it started maybe in 2011, 2012 time  
16       frame. I applied for the second panel  
17       based upon the nature -- the panel moving  
18       forward, what is -- the focus on  
19       analytical methodologies, which is what  
20       interests me scientifically, mineralogy  
21       and other things, and so I applied for  
22       it.

23              Q.       And the time period was what  
24       time period? It was 2011 did you say?

1           A.       The first talc expert panel  
2       I think convened in 2010 or 2011, and  
3       they published a first stimuli article, I  
4       believe, in the year 2015, and then they  
5       put out a call for experts to form the  
6       second talc expert panel around that  
7       time, and I applied for that second talc  
8       expert panel and was chosen.

9           Q.       Okay. And you know that  
10      your client Johnson & Johnson -- do you  
11      refer to Johnson & Johnson as a client?  
12      How do you refer to them?

13           A.       I consider them a client.

14           Q.       Okay. You know that your  
15      client Johnson & Johnson suggested that  
16      you work on that?

17           A.       They did not. I was not  
18      doing work for Johnson & Johnson in  
19      litigation at that point. I had no  
20      client tell me or inform me of that event  
21      or that was happening. I knew of it from  
22      my own following of the literature and  
23      staying abreast of issues and applied for  
24      it.

1                   Q.       Okay. Let's go to the  
2       third -- I'm sorry. Let's go to the  
3       fifth and sixth exhibits. They're in the  
4       next folders, Dr. Sanchez.

5                               We'll mark for the record  
6       Exhibits 5 and 6. The first one will be  
7       Exhibit 5 and it will be the expert  
8       report in the Balderrama matter, and it  
9       also contains in the back a list of  
10      materials.

11                  A.       So that would be Exhibit 5?

12                  Q.       Yes. And then just for the  
13      record, we'll do the same thing with the  
14      Carl report. Same date, generally  
15      speaking, same material. We'll mark that  
16      as Exhibit 6 for the court reporter.

17                           And tell me when you're  
18      ready to answer questions and I'll go  
19      forward.

20                  A.       So just to be clear, you're  
21      marking as Exhibit 5 my general report,  
22      as I would call it, in Balderrama. Also  
23      attached to my general report is my  
24      documents reviewed and relied upon list?

1 Q. Correct.

2 A. Okay. So Exhibit 5 is both  
3 of those documents. Okay.

4 Q. Yep. And Exhibit 6 is the  
5 same thing for the Carl matter.

6 A. I'm sorry. Also, attached  
7 in Exhibit 5 at the end is a report of a  
8 review I did of certain sections of a Dr.  
9 David Kessler's report.

10 Q. Yes.

11 A. As well as sections of a  
12 report done by a Dr. William Sage, M.D.

13 Q. Okay. That's correct.  
14 That's all correct.

15 MR. HYNES: Just to note for  
16 the record, I don't believe that  
17 the Balderrama and Carl material  
18 reviewed and/or relied upon list  
19 are the very most up to date. I  
20 believe they're missing -- if I  
21 look at the most recent versions  
22 that were produced, looks like  
23 they are missing the expert  
24 reports of Dr. Su and Wiley from

1 the MDL.

2 MR. OLIVER: Okay.

3 MR. HYNES: And those were  
4 produced as part of the June 14th  
5 production set list.

6 BY MR. OLIVER:

7 Q. Okay. So, Dr. Sanchez, you  
8 intend to rely on the expert reports of  
9 Ann Wiley and Dr. Su in your opinions in  
10 the multidistrict litigation?

11 A. Yes. I find them sound  
12 documents. I'd rely upon them.

13 Q. Did you review them?

14 A. I did.

15 Q. When did you review them?

16 A. I think I -- over the --  
17 sometime in the last month is my  
18 recollection. Not in the past week or  
19 week and a half, but prior to that.

20 Q. Yeah. Regardless, they're  
21 just not on the Balderrama list and now  
22 you're including them on the list, fair  
23 enough?

24 A. That's fair.

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1           Q.       Okay. So the Balderrama and  
2       Carl reports, your general reports in  
3       those cases, do those fairly encompass  
4       the opinions you intend to offer in the  
5       multidistrict litigation?

6                   MR. HYNES: Vague,  
7       overbroad.

8                   THE WITNESS: Yes, they  
9       should contain my opinions or  
10      reference other reports outside of  
11      those reports for my opinions.

12      BY MR. OLIVER:

13           Q.       And can you agree with me  
14      that if you plan to change or add any  
15      testimony to anything in these reports,  
16      that you will let the lawyers for the  
17      plaintiffs know so we can prepare to  
18      depose you again?

19           A.       Yes, I can agree to that.

20           Q.       Now, one of the rebuttal  
21      reports that you had pointed out in the  
22      Balderrama report -- well, let me just  
23      back up.

24                   I'm going to ask you a

1 series of questions about the Balderrama  
2 reports in detail, but I'm going to do  
3 that a little later on in the deposition.  
4 So at some point you'll need to put that  
5 aside, but just keep it with you, if it's  
6 okay with you, you know, right in view so  
7 that I can go back to that. In other  
8 words, don't sort of throw it in a stack  
9 and lose track of it.

10 One of the things that you  
11 mentioned that was attached to the  
12 Balderrama report was a rebuttal report  
13 for Dr. David Kessler, correct?

14 A. Correct.

15 Q. Now, you know that Dr. David  
16 Kessler is a medical doctor, correct?

17 A. Correct.

18 Q. You know that he also  
19 received a law degree?

20 A. I -- okay. I don't know if  
21 I know that or not, but...

22 Q. Okay. You filed a rebuttal  
23 report to his report without knowing his  
24 full qualifications?

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1           A.       Are you saying that a law  
2       degree makes him an expert in geology?

3                   I only focused on his  
4       reports on the areas where he was talking  
5       about geology or mineralogy.

6           Q.       Yeah, and I'm not saying  
7       that at all. I'm just saying you filed a  
8       rebuttal report against Dr. Kessler  
9       without knowing his full qualifications.

10                   That's a true statement?

11                   MR. HYNES: Objection;  
12       argumentative.

13                   THE WITNESS: I don't even  
14       know if it's true that he got a  
15       JD, but again, I don't -- I don't  
16       have a recollection of that.

17       BY MR. OLIVER:

18           Q.       Okay. Did you know that he  
19       was the commissioner -- formerly the  
20       commissioner of the Food and Drug  
21       Administration for the United States of  
22       America?

23           A.       Same answer. That doesn't  
24       give him any expertise in geology or



1 mineralogical matters, which is what I --  
2 which is what I was asked to look at and  
3 respond to.

4 Q. And certainly you would  
5 agree given his pedigree, that it gives  
6 him the authority and education necessary  
7 to talk about the health effects of  
8 minerals that are commonly referred to as  
9 asbestos, right?

10 MR. HYNES: Objection; form,  
11 argumentative, calls for  
12 speculation.

13 THE WITNESS: I did not look  
14 at those issues. I already  
15 covered in this deposition those  
16 are not my areas of expertise. I  
17 did not look at those sections nor  
18 would I be qualified as an expert  
19 to be able to look at those, but  
20 to try to answer your question,  
21 the issue is regardless of what  
22 you called pedigree, it doesn't  
23 mean that somebody is right. The  
24 issues that I dealt with were

1 looking at the areas of my  
2 expertise, which is in geology and  
3 mineralogy, and he made factually  
4 inaccurate statements in those  
5 areas.

6 BY MR. OLIVER:

7 Q. And that wasn't my question.  
8 My question was: As a medical doctor who  
9 was formerly the commissioner of the Food  
10 and Drug Administration, you agree that  
11 Dr. Kessler is qualified to talk about  
12 the health effects of asbestos? You  
13 agree with that, right?

14 MR. HYNES: I'm going to  
15 issue the same objections and also  
16 asked and answered.

17 THE WITNESS: I can't agree  
18 or disagree as I'm not an expert  
19 in that field nor do I know his  
20 expertise in that field in order  
21 to evaluate that. That is not  
22 what I was asked to look into.  
23 That would be beyond the scope of  
24 what I would be qualified to

1 assess.

2 BY MR. OLIVER:

3 Q. You don't have any expertise  
4 in FDA regulations do you, Dr. Sanchez?

5 A. I would not hold myself  
6 forward as such an expert, correct.

7 Q. And you never held any  
8 position in any capacity where your job  
9 was to protect the public health in the  
10 United States or any other place, right?

11 A. Of course not.

12 Q. So the only thing that you  
13 disagree with Dr. Kessler about are  
14 geological or mineralogical issues; is  
15 that -- is that fair?

16 MR. HYNES: Misstates  
17 testimony.

18 THE WITNESS: That is -- the  
19 area of my expertise is in those  
20 areas. I was asked to look at the  
21 reports by both those medical  
22 doctors relating to opinions they  
23 were providing in their reports  
24 regarding matters of geology and

1           they -- and they were factually  
2           inaccurate in their assertions and  
3           assumptions, as I detailed in  
4           those reports.

5       BY MR. OLIVER:

6           Q.       Your primary client at RJ  
7       Lee is Johnson & Johnson, correct?

8           A.       Depending on the years, but  
9       the majority of work I have done  
10      historically in litigation has been for  
11      Johnson & Johnson.

12          Q.       Okay.   Approximately how  
13      much money do you make a year, Dr.  
14      Sanchez?

15          A.       I testified to this before,  
16      but I -- a little north of \$500,000 a  
17      year.

18          Q.       Is that exclusive of bonus  
19      or before bonus?

20          A.       That's all my income related  
21      to my work for RJ Lee Group.

22          Q.       And you don't have any other  
23      source of income that has any  
24      relationship to J&J, do you?

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1           A.       I don't know what you mean  
2       by that.

3           Q.       You're not doing any kind of  
4       side work for Johnson & Johnson, like, on  
5       an independent contractor basis that  
6       doesn't go through RJ Lee?

7           A.       Correct.

8                   MR. OLIVER:   We've been  
9       going about an hour.   Why don't we  
10      take a quick five minute bathroom  
11      break, and I'm going to grab some  
12      water.

13                   (A short recess was taken  
14      from 12:03 p.m. until 12:11 p.m.)

15   BY MR. OLIVER:

16           Q.       Dr. Sanchez, you agree that  
17      asbestos is a carcinogen, true?

18                   MR. HYNES:   Beyond his  
19      expertise.

20                   THE WITNESS:   Yeah, I don't  
21      dispute that.

22   BY MR. OLIVER:

23           Q.       And because we know that  
24      asbestos is a carcinogen, you agree that

1       when handling asbestos, people should be  
2       careful with it, correct?

3                   MR. HYNES:   Vague.

4                   THE WITNESS:   As I've  
5                   testified many times before, I  
6                   don't want -- I don't want anyone  
7                   exposed to asbestos.

8       BY MR. OLIVER:

9                   Q.       And if there's asbestos in a  
10                   product, you agree that you need to tell  
11                   people about that?

12                   A.       As far as my role is  
13                   concerned, if I find asbestos in a  
14                   product, I always report it out, yes.

15                   Q.       So you agree that people  
16                   have a right to know if there's asbestos  
17                   in a product?

18                   MR. HYNES:   Overbroad.

19                   THE WITNESS:   I think I just  
20                   stated that.   If I'm sent a sample  
21                   through testing, if somebody,  
22                   whether it's a homeowner, a  
23                   company like Johnson & Johnson  
24                   want to know if asbestos is in a

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1 product and I test it and find  
2 asbestos, I report that to them.

3 BY MR. OLIVER:

4 Q. And that's not my question.  
5 My question is not what you do.

6 My question is that if  
7 there's a consumer product that has  
8 asbestos in it, you would agree that  
9 consumers have a right to know that  
10 information, right?

11 A. This seems like a legal kind  
12 of question. I -- I as a consumer would  
13 want to know that information. I think I  
14 can only phrase it that way.

15 Q. Okay. Fair enough.

16 And you would want to know  
17 that information even if the -- it was  
18 only possible that there was asbestos in  
19 the product, right?

20 MR. HYNES: Vague, misstates  
21 testimony.

22 THE WITNESS: Again,  
23 you're -- I'm here as a scientist  
24 based -- supposed to look at

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1 facts, data and draw logical or  
2 reasonable conclusions from those  
3 things. You're getting into  
4 speculation. I'm not here to  
5 testify on my own behalf of my  
6 feelings towards one thing or  
7 another. My -- but again, I would  
8 want to know if a product  
9 contained asbestos on a personal  
10 level.

11 This idea, notion of  
12 possibly could contain doesn't  
13 provide any knowledge. I would  
14 need knowledge, not possibilities  
15 or conjectures.

16 BY MR. OLIVER:

17 Q. So if there was a  
18 possibility that a consumer product you  
19 were using contained asbestos, you're not  
20 concerned with that. You wouldn't want  
21 to know?

22 A. That's not what I stated.

23 MR. HYNES: Incomplete  
24 hypothetical.



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1                   Sorry.   Continue.

2                   THE WITNESS:   That was not  
3                   my answer.   I'm not here to speak  
4                   over -- to speak to my personal  
5                   feelings or approaches to things.  
6                   I'm looking at -- I'm here as a  
7                   scientist looking at data, drawing  
8                   conclusions.

9           BY MR. OLIVER:

10                  Q.       With respect -- I'm sorry.  
11                  You're not finished.   I didn't mean to  
12                  interrupt you.

13                  A.       Well, you've done it about  
14                  five times.   So please, let me finish my  
15                  answers.   I'll try to be brief, but --

16                  Q.       Good luck.

17                  A.       All right.   Never mind.

18                  Move on.

19                  MR. HYNES:   Yeah, Counsel,  
20                  can we not throw side comments at  
21                  the witness and please just --

22           BY MR. OLIVER:

23                  Q.       I interrupted you, and  
24                  that's my fault.   Go ahead, Dr. Sanchez.

1           A.       Again, I'm looking at -- I'm  
2       here as a scientist, not here to make  
3       conjectures, to agree with or disagree  
4       with conjectures and things that are not  
5       proven. There are a lot of things  
6       that -- like that argument goes every  
7       which way. You can make the same  
8       argument that any product ever made could  
9       contain asbestos. Does that mean that it  
10      does? Well, no. You need to show that  
11      it does, and that's what I'd want. I  
12      would want sound reliable data to base my  
13      opinions on.

14           Q.       Okay. So Dr. Sanchez, I  
15      understand that you have an opinion about  
16      what you're here to do and what you're  
17      here not to do, and the fact of the  
18      matter is this is a court proceeding. As  
19      much geological expertise as you may  
20      have, you don't have the expertise that I  
21      have as an attorney and you don't have  
22      the authority to establish what you're  
23      here to do and what you're not here to  
24      do.

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1                   What you're here to do is  
2                   answer questions under oath. You've  
3                   taken an oath to answer those questions,  
4                   fair?

5                   MR. HYNES: I'm going to  
6                   object to the colloquy,  
7                   argumentative.

8                   Continue.

9                   BY MR. OLIVER:

10                  Q.       You have taken an oath to  
11                  answer my questions, right, Dr. Sanchez?

12                  A.       I'm answering your  
13                  questions, sir.

14                  Q.       You're arguing with me about  
15                  what questions I should or should not ask  
16                  or what questions you're here to answer.  
17                  Quite frankly, it's just inappropriate.  
18                  So I'm going to ask my question again and  
19                  I'm going to try my best to frame it in a  
20                  way that you understand what I'm asking.  
21                  Okay?

22                         You told me earlier that if  
23                         you were using a consumer product, you  
24                         would want to know if it had asbestos in

1       it.

2                       My follow-up question to  
3       that is: If you, Matthew Sanchez, were  
4       using a product that potentially could  
5       contain asbestos, would you also want to  
6       know that?

7                       MR. HYNES: I'm going to  
8       object; colloquy, argumentative,  
9       incomplete hypothetical, asked and  
10      answered.

11                      THE WITNESS: The answer  
12      would be that there is no --  
13      again, you're talking about  
14      possibilities. I find that from a  
15      personal level preposterous to  
16      think that every product I go buy  
17      at a store, regardless of what it  
18      is, would have to put labeling of  
19      all the possibilities. What I  
20      need to know is what is in it in  
21      order to make a rational decision,  
22      not possibilities or not somebody  
23      alleged it might contain it and so  
24      it gets on a label. I don't

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1 understand that logic, where that  
2 ends.

3 I would need -- I want data.  
4 I want true statements, not  
5 allegations or possibilities.

6 BY MR. OLIVER:

7 Q. Okay. You've offered some  
8 opinions in this case about mining and  
9 how mining processes work in talc  
10 production, right?

11 A. I have -- I've described  
12 mining processes in my report, yes.

13 Q. Do you agree that miners who  
14 are mining in a talc mine that might have  
15 asbestos contamination in it, you agree  
16 that they have a right to know about  
17 that, correct?

18 MR. HYNES: Objection;  
19 incomplete hypothetical, vague,  
20 argumentative.

21 THE WITNESS: Again, I'm not  
22 here to speak of peoples -- these  
23 questions appear to be legal in  
24 nature and so I don't -- I don't

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1           understand the context. Like I  
2           can't -- I don't know how to  
3           answer the question. I'm confused  
4           by the nature of the question, I  
5           guess.

6                     Can you rephrase that in a  
7           way that it's a scientific  
8           proposition?

9       BY MR. OLIVER:

10           Q.       Do miners in talc mines have  
11           a right to know of the potential for  
12           asbestos contamination where they're  
13           working?

14                     MR. HYNES: Again, same --  
15           same objections.

16                     THE WITNESS: Again, the  
17           idea of a right, again, I can just  
18           speak if -- if there is, in fact,  
19           asbestos present in an  
20           environment, people should know  
21           about it, but I don't know about  
22           rights. That seems to be --  
23           again, that seems to be legalese  
24           to me, not scientific or knowledge

1 based.

2 BY MR. OLIVER:

3 Q. And you agree -- you agree  
4 with me, Dr. Sanchez, that individual  
5 fibers and bundles of asbestos are not  
6 visible to the naked human eye, correct?

7 MR. HYNES: Objection;  
8 overbroad.

9 THE WITNESS: It depends on  
10 the dimensions of the particles  
11 whether they would be visible or  
12 not and in what state.

13 Generally speaking, the  
14 visible fibrils of a asbestos in  
15 air would not be visible to the  
16 naked eye, but they do not occur  
17 as individual fibrils of asbestos  
18 when you're dealing with mining  
19 and dealing with rocks and body  
20 powders.

21 BY MR. OLIVER:

22 Q. Well, individual fibrils of  
23 asbestos would get into the air. They  
24 could get into the air many different

1 situations, right?

2 A. Yeah, that seems not felt  
3 well, but there could be -- there's all  
4 sorts of mechanisms for asbestos to  
5 become airborne, assuming it's present  
6 and it's being dealt with or manipulated.

7 Q. Okay. And airborne fibers  
8 of asbestos that have gotten into the air  
9 through one process or another are not  
10 visible to the human eye, correct?

11 A. Individual airborne fibers  
12 of asbestos would not be visible to the  
13 human eye.

14 Q. And those airborne fibers of  
15 asbestos, however they got into the air,  
16 will eventually settle. They obey the  
17 laws of gravity, correct?

18 A. They would eventually settle  
19 assuming they don't stay airborne with  
20 some constant wind current or something,  
21 but yes.

22 Q. Okay. So absent the  
23 constant wind current, asbestos fibers  
24 that get into the air would settle on



1       whatever surface they were floating over,  
2       fair enough?

3               A.       As a general proposition,  
4       yes.

5               Q.       Okay. Now, these individual  
6       fibers of asbestos that can become broken  
7       up, you actually need very specific tools  
8       to look at them, right?

9               A.       I'm not following you. I'm  
10      sorry.

11              Q.       You need a microscope to see  
12      them, correct?

13              A.       Depending upon the size of  
14      the fibers, you might need -- different  
15      microscopes may or may not do what you  
16      need it to do.

17              Q.       And, in fact, that's what  
18      you do in these cases. You use a  
19      microscope to look at very, very small  
20      particulate matter and determine whether  
21      or not it is asbestiform material, right?

22              A.       As per the methods, yes.

23              Q.       Okay. And the tools you use  
24      include TEM microscopes, right?

1 A. That's correct.

2 Q. Polarized light microscopy,  
3 correct?

4 A. Correct.

5 Q. Selected area x-ray  
6 defraction is a tool that you use,  
7 correct?

8 A. Incorrect.

9 Q. Okay. Can you explain to me  
10 what I got wrong about that?

11 A. There's no such thing as  
12 selected area x-ray defraction.

13 Q. Just tell me what I got  
14 wrong about it, Dr. Sanchez. I  
15 understand that you're the expert.  
16 That's why I'm asking you the question.

17 A. Part of the TEM testing uses  
18 something called EDS, energy dispersive  
19 spectroscopy, to determine composition.  
20 Another function of the TEM  
21 instrumentation is something called  
22 electron defraction.

23 Q. Okay. That's what I got  
24 wrong. I'm sorry. Thank you for your

1 clarification.

2 So these are all specialized  
3 methods that you went to school to learn  
4 about, right?

5 It's one of the things you  
6 learned at school, fair?

7 A. Yes, analytical  
8 instrumentation is one aspect of my  
9 schooling.

10 Q. And how many years have you  
11 studied to properly identify microscopic  
12 asbestos particles?

13 You personally, how many  
14 years of study did you put in before you  
15 felt confident identifying asbestos  
16 particles under a microscope as asbestos  
17 particles?

18 A. Yeah, I don't know if I ever  
19 thought about it in those terms, so give  
20 me a moment.

21 I'd say at least three to  
22 four years of study of looking at  
23 asbestiform materials, but I'm not  
24 saying -- but I continue to learn today

1 as well. So you can say pretty  
2 much every -- since 2004. Twenty years  
3 I've been studying and learning about  
4 these -- about this issue, and I  
5 continually learn.

6 Q. Will you agree that as an  
7 attorney, first of all, I can't look  
8 under a microscope with no training and  
9 determine what is or is not an asbestos  
10 particle, true?

11 A. Without any training, that  
12 would be difficult.

13 Q. And I can't just look at  
14 pictures on a screen that you or some  
15 other scientist have taken and determine  
16 whether or not something is an asbestos  
17 particle without the proper training,  
18 correct?

19 A. With -- that is correct, but  
20 also, you'd need more than an image.  
21 You'd also need other -- the other data  
22 associated with those particles to be  
23 able to independently assess.

24 Q. But I can't independently

1        assess those particles because I'm not  
2        trained to do that, right?

3                    I'm a layperson who doesn't  
4        have the relevant knowledge, fair?

5                    A.        Assuming that the correct  
6        data and the methods have actually been  
7        followed in a sound way, even if you are  
8        an untrained person at the back side,  
9        that would be difficult -- that would be  
10       a difficult task.

11                   Q.        I can't look at a rock and  
12       determine whether asbestos particles have  
13       landed on that rock during the mining  
14       process, right?

15                   I mean, I can't see that  
16       with my naked eye?

17                   A.        Sorry. So you're -- I'm  
18       just trying to clarify your question.

19                   So you're back to the idea  
20       of a single fibril of asbestos invisible  
21       to the human eye falling on top of a rock  
22       during mining?

23                   Q.        Sure.

24                   A.        If you can't see the

1 particle in the air, you can't see it  
2 laying on the surface of something unless  
3 there's a bunch of it accumulated.

4 Q. How much asbestos -- how  
5 many asbestos particles would have to  
6 accumulate on a rock for you to be able  
7 to see them with your naked eye?

8 MR. HYNES: Incomplete  
9 hypothetical.

10 THE WITNESS: Back to the  
11 idea of fibers falling out of air,  
12 I don't know the number, but if  
13 there's a significant  
14 accumulation, dust of asbestos  
15 fibers, at some point a pile of  
16 asbestos fibers will be visible to  
17 the human eye. I don't know how  
18 many that would be numerically.

19 BY MR. OLIVER:

20 Q. You agree with me that even  
21 if it was hundreds of thousands of  
22 particles, because they're so small, you  
23 wouldn't be able to see hundreds of  
24 thousands of particles with your naked

1 eye, right?

2 MR. HYNES: Incomplete  
3 hypothetical.

4 THE WITNESS: You might be  
5 able to. I have not looked into  
6 it, but at some point the  
7 accumulated -- accumulated dust of  
8 those asbestos fibers would be  
9 visible to your eye. You could  
10 see that there was dust, there was  
11 something on -- on the surface of  
12 the rock. You would --

13 BY MR. OLIVER:

14 Q. I'm sorry. Go ahead.

15 A. You'd still need to do work  
16 to identify what it is, but just because  
17 an individual particle may be invisible  
18 to the human eye, a bunch of individual  
19 particles all piled up and stacking each  
20 other and accumulating over time on a  
21 surface would become visible to the human  
22 eye.

23 Q. And what you just explained  
24 to me is you would see those particles

1       that accumulated as dust, correct?

2               A.       Correct.

3               Q.       But you could not identify  
4       them as asbestos or some other dust  
5       without doing further work.

6                       That's what you just  
7       explained?

8               A.       Yes.   In order to identify  
9       asbestos, you always have to do some sort  
10       of analytical work in order to identify  
11       asbestos regardless whether it was  
12       settled dust out of air as you -- as your  
13       question suggests or whether or not it's  
14       actually like a vein of asbestos in the  
15       rock.   You'd still have to do analytical  
16       work in order to name it and characterize  
17       it and identify it.

18              Q.       When -- when you and I are  
19       talking or -- well, strike that.

20                      In your report and your  
21       testimony you use the terms asbestos form  
22       or asbestiform to describe what you opine  
23       is true asbestos, correct?

24              A.       It's not me.   The methods



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1       themselves require that you determine the  
2       morphology of the amphibole or serpentine  
3       that you're observing. The methods  
4       themselves define asbestos using the term  
5       asbestiform. The methods themselves  
6       define what is the asbestiform morphology  
7       that you need to see and observe in order  
8       to report out asbestos.

9               Q.       And when you see those terms  
10       asbestos form or asbestiform in your line  
11       of work, you agree that at that point the  
12       author or speaker is talking about the  
13       dangerous form of asbestos, right?

14               MR. HYNES:   Overbroad,  
15       vague, incomplete hypothetical.

16               THE WITNESS:   I don't  
17       understand what you mean by  
18       dangerous form of asbestos. Like  
19       I don't --

20       BY MR. OLIVER:

21               Q.       You know what, I realized I  
22       asked a bad question.

23               When you see those words  
24       asbestos form or asbestiform, you agree

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1       that the mineral the author or speaker is  
2       talking about, that's dangerous. That's  
3       the carcinogenic type of mineral, right?

4               MR. HYNES: Same objections.

5               THE WITNESS: It would  
6       really depend on the -- on the  
7       time frame. Many of the  
8       terminologies that we use today,  
9       today they are well-defined. They  
10      have significance because they are  
11      actually adopted into generally  
12      recognized and accepted testing  
13      methodologies, but that's not to  
14      say that people before the advent  
15      of these testing methodologies and  
16      the development of these would  
17      have used the term in the same  
18      way.

19              I've seen the term  
20      asbestiform used incorrectly in  
21      historical literature with respect  
22      to how we use it today and how it  
23      is used in analytical  
24      methodologies. So it really

1 depends upon the usage of the  
2 term.

3 One such example is a 1976  
4 role and others at Mt. Sinai  
5 published a paper testing talcum  
6 powder products that they had  
7 purchased off the shelf I believe  
8 in the early '70s. They used the  
9 term asbestiform in that paper,  
10 but they do not use the term  
11 asbestiform as it is understood  
12 today. They have, like, kind of  
13 their own unique definition for  
14 that, which is not generally  
15 accepted or recognized. So it  
16 really depends on how the term is  
17 being used in specific documents  
18 and by specific authors, but  
19 historically, that term was used  
20 much broader than it is used today  
21 as it is used in context of the  
22 regulations and analytical  
23 methodologies to meet -- to meet  
24 those regulatory requirements.

1 BY MR. OLIVER:

2 Q. Well, let's start with a  
3 couple of questions so I understand your  
4 opinion.

5 First of all, you agree that  
6 even today it still happens that the  
7 terminology surrounding asbestos is used  
8 inconsistently by different authors and  
9 regulators and organizations, right?

10 MR. HYNES: Vague,  
11 overbroad.

12 THE WITNESS: It just  
13 depends on any specific article,  
14 but I have seen the term used not  
15 consistent with the regulatory  
16 language and with what actually  
17 describes or is used to -- what is  
18 asbestos, but it really -- it  
19 really depends on the specific  
20 paper whether or not the term is  
21 being used consistently with how  
22 it is used in the -- in the  
23 regulatory language in the  
24 generally accepted methodologies

1           that are used for regulatory  
2           compliance.

3       BY MR. OLIVER:

4           Q.       Right. And, Dr. Sanchez, my  
5       question -- I think you've answered it.  
6       You haven't answered it clearly, so I'm  
7       going to ask you to clarify.

8                   My question was: Even today  
9       the terminology surrounding asbestos can  
10      be used inconsistently by different  
11      authors, right?

12                   And it seems like you agreed  
13      with that statement; is that true?

14                   MR. HYNES: Vague,  
15      overbroad, asked and answered.

16                   THE WITNESS: It is true,  
17      but again, I would -- I would  
18      defer to specific usages of  
19      different authors to be able to  
20      actually be able to say anything  
21      specific, but people -- it's not  
22      only an issue with quote/unquote  
23      asbestos. It's an issue lots of  
24      places where terms are used, but

1           are not -- but they're not being  
2           used properly in science. That's  
3           always an issue in scientific  
4           literature whether the terms that  
5           are being used are -- are  
6           accurately being used. That's  
7           always an issue regardless if it's  
8           asbestos or not, but those are  
9           always important things,  
10          definition of terms, what are  
11          people actually speaking to, how  
12          are they using that applicable and  
13          being used properly in another  
14          context.

15       BY MR. OLIVER:

16           Q.       At some point in time, you  
17       believe that the usage of the term  
18       asbestiform or asbestos form became more  
19       well-defined; is that true? Is that an  
20       opinion you hold?

21           A.       Well, yes, there were --  
22       yes. There -- I just gave one example of  
23       where it was used in a different manner  
24       than it is used today. There was a lot

1 of work on U.S. Bureau of Mines in the  
2 late '70s trying to harmonize and trying  
3 to give guidance on proper usage of  
4 terms. I would say that that's when the  
5 terms started to have -- there was an  
6 effort to try to standardize the usage of  
7 these terms as it related to mining and  
8 asbestos and those issues, but whether or  
9 not everyone followed it is another  
10 matter entirely, but they're -- those  
11 definitions have now been put into the  
12 analytical testing requirements. Their  
13 usage is in generally accepted  
14 methodologies and those are the -- those  
15 are the terms and how I use them are  
16 found within those documents.

17 Q. What time period do you  
18 think those terms became more  
19 well-defined?

20 A. As I stated, the late '70s  
21 the work by Campbell and others, they  
22 defined these terms. The way that they  
23 define the terms is the way that OSHA  
24 references them. Campbell is referenced

1 in the ISO methodologies. It is  
2 referenced in the EPA methodologies. So  
3 at least at that point, late '70s is what  
4 I mean, but that doesn't mean that people  
5 follow that, you know. So you really  
6 have to look at specific usages to  
7 determine whether it's consistent with --  
8 with how that term should be used.

9 Q. And the way that you use  
10 those terms because of your expertise is  
11 from a geological or mineralogical  
12 perspective, correct?

13 A. Only in part. What I --  
14 what I mean by that is if you actually  
15 look at asbestos, the definitions that  
16 I -- that are developed are based upon  
17 what asbestos looks like, what are the  
18 characteristics of asbestos.

19 Asbestos is a mineralogical  
20 material, a geological material, but  
21 those definitions are based upon what  
22 that material actually looks like.  
23 They're not derived out of whole cloth.  
24 They're derived after observable data,



1       observable physical properties that can  
2       be used for identification.

3               Q.       So the term asbestos you  
4       agree with me is not a mineralogical or  
5       geological term, right?

6               A.       It's more of an industrial  
7       term I would say, but it's referring to  
8       geological or mineralogical materials  
9       that are -- that were exploited for  
10      industrial purposes.

11              Q.       And it has a medical  
12      definition as well, right?

13              A.       Can you provide that to me?  
14                      I'm not sure. I've not seen  
15      an official medical definition of  
16      asbestos other than what I find in  
17      regulatory language. I don't know  
18      another definition.

19              Q.       It has a -- it has a  
20      regulatory definition that -- well, first  
21      of all, it has a regulatory definition,  
22      true?

23                      MR. HYNES:   Vague,  
24                      overbroad.

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1 THE WITNESS: For the  
2 purpose of regulation, yes.

3 BY MR. OLIVER:

4 Q. Okay. And you agree that  
5 the medical community relies on that --  
6 as far as you know, relies on that  
7 regulatory definition when talking about  
8 asbestos, right?

9 MR. HYNES: Vague,  
10 overbroad, calls for speculation.

11 THE WITNESS: I've -- I've  
12 seen medical people not use that  
13 language when they define  
14 asbestos. So I can't agree with  
15 that. I think you have to look at  
16 specific publications or specific  
17 research groups and evaluate  
18 whether -- how they're defining  
19 asbestos is consistent with the  
20 regulatory usage. Some instances  
21 it could be. Some instances it  
22 may not be. I've seen both. So I  
23 think you really need to look  
24 at -- I'd have to see specific --

1           specific usage and whether or not  
2           that comports to the regulatory  
3           usage.

4       BY MR. OLIVER:

5           Q.       Regardless, prior to the  
6           late '70s, you'd agree that the term  
7           asbestos or asbestiform was not  
8           well-defined, right?

9           A.       I think from a general  
10          matter that -- that's -- I don't --  
11          that's a good question.

12                    I'm sorry. Let me think  
13          about that for a second.

14                    From my understanding, they  
15          started to regulate things that were  
16          asbestos and things that were used in  
17          commerce as asbestos that were tied to  
18          adverse health effects dating back  
19          decades and decades. When you have an  
20          explosion of research into asbestos,  
21          you've had a lot of different people of  
22          different backgrounds starting to do work  
23          in that area and kind of learning as they  
24          go. So you would get a lot of confusion

1 with people coming in and trying to  
2 understand this problem, looking at  
3 different aspects of the problem for the  
4 first time, and those -- and so our  
5 knowledge as scientists would steadily  
6 increase over time as things get refined  
7 and terminology gets better and better  
8 understanding across -- you know, across  
9 disciplines.

10 Q. And I think my question was  
11 a little more simple.

12 Prior to the 1970s, you  
13 testified that the term was not well --  
14 the terminology surrounding asbestiform  
15 materials was not well-defined prior to  
16 the late '70s. That's what I'm asking  
17 you.

18 Is that your opinion or not?  
19 I thought you expressed that opinion?

20 MR. HYNES: Asked and  
21 answered.

22 THE WITNESS: Yeah, I  
23 thought I answered your question.  
24 I'm sorry if it wasn't clear. Let

1 me try again.

2 As -- as more interest came  
3 into asbestos and different --  
4 different background, different  
5 scientific background started  
6 getting involved in asbestos  
7 research, those -- the early --  
8 you know, when you have -- when  
9 you have a problem that's defined  
10 and -- you'll get a rush of people  
11 doing work on the problem.

12 Everybody coming in to try to  
13 solve that problem is not going to  
14 be using at the beginning the same  
15 terminology, the same  
16 understandings, the same -- the  
17 same information. So you need to  
18 adapt research at those times of,  
19 I guess, lack of a better word, or  
20 just kind of as a chaos, you need  
21 to define all of that work or try  
22 to understand all of that work  
23 based upon the better  
24 understanding we have today.

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1                   So I would agree that there  
2                   is, especially historically, a  
3                   much more misunderstanding and  
4                   list of usages of terms like  
5                   asbestos, like asbestiform, but  
6                   again, I think you need to  
7                   evaluate that earlier work and  
8                   that time of chaos under which we  
9                   understand today as our knowledge  
10                  has increased. You need to always  
11                  evaluate that information based  
12                  upon the knowledge we have today  
13                  in order to really understand what  
14                  those -- what those older  
15                  researchers or documents may mean.

16       BY MR. OLIVER:

17               Q.       Dr. Sanchez, I believe you  
18               told me -- well, when you're looking --  
19               let me back up.

20                       When you're looking at older  
21               documents, you agree that you, Dr.  
22               Matthew Sanchez, cannot get into the mind  
23               of a writer of a historical document,  
24               right?

1           A.       Not unless they have  
2       well-defined terms that they defined  
3       beforehand, that is -- that is correct.

4           Q.       Okay. So if an author uses  
5       a word in a historical document and they  
6       don't define the terms very precisely,  
7       the best information you, Matthew  
8       Sanchez, has about that is what they  
9       wrote down, fair?

10          A.       Fair.

11          Q.       Okay. Now, I want to talk a  
12       little bit about your mining opinions.

13                 You told me earlier that --  
14       and I'm just paraphrasing. I know  
15       Kevin's going to object and, you know --  
16       I'm not trying to misrepresent your  
17       testimony. I'm simply trying to  
18       re-orient what you said and understand if  
19       you really said that.

20                 You said something about the  
21       fact that science doesn't deal with  
22       absolutes very well.

23                 Do you remember that  
24       testimony?

1           A.       Yes.

2           Q.       Okay. So as a scientist,  
3 are you able to say scientifically  
4 something always happens or something  
5 never happens? Is that something that  
6 you as a scientist can say?

7                   MR. HYNES: Incomplete  
8 hypothetical.

9                   THE WITNESS: I need a  
10 specific. For instance, I can  
11 say -- yeah, I mean it's basic  
12 logic. Like you cannot prove  
13 negatives, so you can't make  
14 absolute -- absolute statements.

15                   Your questions dealt with it  
16 never or there's no way or -- I  
17 forget the exact language you  
18 used, so I apologize if I  
19 misrepresented some parts of your  
20 questions earlier, but science  
21 can't answer -- can't prove  
22 negatives. The issue is what  
23 can -- the evidence we have, what  
24 does it show. That is what I'm



1           referring to.

2                   Obviously, there's issues in  
3           science of the fact of gravity,  
4           right? I'm not -- I'm not --  
5           there are certain things that do  
6           hold and appear to be true, but  
7           we're not talking about those  
8           things here. We're dealing with  
9           what may or may not be within a  
10          given product.

11                   So I don't know if that  
12          helps clarify what I meant by  
13          those statements earlier.

14       BY MR. OLIVER:

15               Q.       I think that helps me.

16                   So let's just take this into  
17          a specific context.

18                   So in the context of Johnson  
19          & Johnson's talc mines, are you  
20          scientifically saying there has never  
21          been asbestos in any of those mine  
22          sources?

23               A.       No, I've never said that.  
24          For instance, this as an example, I --

1       there is evidence that I find compelling  
2       that in the Vermont talc mines, in  
3       certain areas there was asbestos. There  
4       are some -- there are some images that  
5       have been provided in some corporate  
6       documents from, like, Imerys, for  
7       example, that does look like asbestos,  
8       but the fact that somewhere on a mined  
9       property asbestos may occur in localized  
10      areas, what the issue is, does -- how is  
11      that representative of what was actually  
12      being mined and sold. If you want to  
13      know what's in the material being mined  
14      and sold, you look at the material that  
15      was being mined and sold, and that I have  
16      done and have not found asbestos in those  
17      materials. So the extrapolation from a  
18      localized area within a mining -- a mine  
19      site to somehow be in contamination of  
20      the whole mine or characteristic of the  
21      whole mine, that is -- that is improper  
22      and incorrect.

23               Q.       And let's get a little  
24      more -- let's get a little more detail

1       here.

2                       First of all, there are  
3       three main sources of Johnson & Johnson  
4       talc that are relevant to this  
5       litigation. There was Italian sourced  
6       talc in the Val Chisone or Val Germanasca  
7       Valley, correct?

8               A.       Correct.

9               Q.       Okay. And that stopped  
10       being the source in the early '70s; is  
11       that right?

12              A.       My understanding -- sorry,  
13       Kevin. Was there an objection?

14                       MR. HYNES: No objection.

15                       THE WITNESS: For -- for the  
16       Johnson & Johnson baby powder, my  
17       understanding is like '67. I  
18       think for the Shower to Shower,  
19       that went into the early '70s  
20       until it switched over to Vermont.

21       BY MR. OLIVER:

22              Q.       Okay. And then at that  
23       point it switched to a Vermont source of  
24       talc, true?

1 A. Correct.

2 Q. And then at some point in  
3 the early 2000s Johnson & Johnson  
4 switched to the Chinese source of talc  
5 which was in the Guangxi province.

6 Is that what it is?

7 A. Guangxi is a province of  
8 China, yes.

9 Q. Okay. So, so far we agree  
10 on the sources where that talc was,  
11 right?

12 A. Yes.

13 Q. And you said that the only  
14 way to know whether there was asbestos in  
15 Johnson's baby powder was to look at the  
16 talc that was mined, right?

17 A. Yes.

18 Q. Okay. Now, for Val Chisone  
19 you have never looked at the talc that  
20 was mined from Johnson's -- for Johnson's  
21 baby powder. You never looked at that  
22 talc as it was mined or as it was taken  
23 out of the mine, right?

24 A. Well, I've looked at talc

1 from that mine, but if you're asking me  
2 whether in 1965 I was testing talc on  
3 behalf of Johnson & Johnson, no, I was  
4 not.

5 Q. Right. And I just want to  
6 draw a distinction.

7 You can look at the talc as  
8 it comes out of the mine or as it's  
9 extracted from the mine, true?

10 A. Yes.

11 Q. And you can look at it  
12 before it's processed or beneficiated,  
13 true?

14 A. Yes.

15 Q. Okay. And then you can also  
16 look at the final finished product that  
17 was ultimately sold to the consumer,  
18 right?

19 A. Right.

20 Q. And those are two different  
21 things because during the beneficiation  
22 process, the mineral product itself is  
23 ground into a very fine particulate  
24 matter that is different than what just

1 comes out of the mine, right?

2 A. But it's still derivative  
3 from the mine, but you're -- that's been  
4 one of my -- one of the importance of  
5 going to the mines and looking at what we  
6 know about the rocks before they're  
7 ground and those other information. That  
8 is important information to have because  
9 as you point out, when you grind up a  
10 talc sample, let's say that talc sample  
11 contains an amphibole mineral that's not  
12 asbestos. Plaintiff experts will then  
13 call all of those minerals asbestos if  
14 they need a simple aspect ratio  
15 dimension. That would be a false  
16 positive.

17 So it is very important to  
18 look at the rocks, understanding the  
19 mineralization of the mines before the  
20 powders are crushed, but it's also very  
21 important to look at the final products  
22 to answer the question of whether or not  
23 asbestos is in the final products. My  
24 recommendation to any client would be to

1 look at it all.

2 Q. Okay. And for Val Chisone  
3 you were never able to look at it all  
4 because you simply -- the only thing you  
5 have access to is some of the historical  
6 finished product bottles, right?

7 A. Only in part. I mean, I  
8 did -- I have been to the Val Chisone  
9 mines in 2015, and so I've done what I  
10 can to understand that -- that mine, you  
11 know, more recently, how does it  
12 correlate with the literature from the  
13 cast of the deposit to try to assess  
14 those questions to the best of my  
15 ability.

16 Q. And my question was more  
17 simple.

18 That first step of looking  
19 at the talc that was actually mined,  
20 you've never done that for the Italian  
21 talc, right? I mean, you just didn't  
22 have it available to you?

23 A. Well, it would be, you know,  
24 physically temporally impossible for me

1 to have looked at that material in the  
2 time frame that Johnson & Johnson was  
3 mining it because that was, you know,  
4 back in the '50s and '60s or supplied to  
5 Johnson & Johnson.

6 Q. And your answer would be the  
7 same for the mine itself. You visited  
8 Val Chisone 40 years after Johnson &  
9 Johnson stopped using it, but you never  
10 got to look at Val Chisone when it was in  
11 the condition and in the circumstances in  
12 which Johnson & Johnson was using it as a  
13 talc source, right?

14 A. I was only able to compare  
15 my observations at the time I was there  
16 to earlier literature, for example, from  
17 like 1966 and the 1970s that exists and  
18 compare my observations with what other  
19 researchers or other scientists had  
20 described. What I saw and what I -- what  
21 I observed was comparable and consistent  
22 with what was described by those that had  
23 studied that talc deposit, you know, 30,  
24 40 years earlier than me. So I think



1       there's a correlation there based upon  
2       the literature that things hadn't changed  
3       dramatically, if in any meaningful way,  
4       to asbestos for sure.

5               Q.       So the answer to my question  
6       with regard to Vermont talc would be the  
7       same. You never actually visited any --  
8       well, first of all, the mines in Vermont  
9       are underground mines, correct?

10              A.       The Hammondsville mine was  
11       underground at the time that Johnson &  
12       Johnson was using it and as a source.  
13       Other mines in Vermont were not, but the  
14       Hammondsville is an underground mine and  
15       it's been abandoned for -- for decades.

16              Q.       And you didn't visit any of  
17       the Vermont mines, did you?

18                      I just don't remember. Did  
19       you visit the Vermont mines?

20              A.       No, I have not visited any  
21       of the Vermont mines at issue in this  
22       case.

23              Q.       So you have never -- when  
24       you're talking about the two things you

1 can look at, the product and the mines,  
2 you know, the extracted rock, you never  
3 looked at any of the extracted rock or  
4 the mines in Vermont as J&J used it,  
5 correct?

6 A. Correct. I don't have any  
7 of those materials available. All I've  
8 been able to do as it relates to the  
9 Vermont is I did have a sample suite  
10 collected at the Argonaut mine by  
11 Professor Mickey Gunter, and then I have  
12 been able to actually test product that  
13 would have come from those mines of  
14 Johnson & Johnson.

15 Q. But Professor Gunter's  
16 sample from Argonaut mine was collected  
17 when?

18 A. I'd have to go back and  
19 check, but I believe it was -- from  
20 memory, it was 2012 time frame, 2011.

21 Q. And that's long, long after  
22 Johnson & Johnson had stopped using the  
23 Argonaut mines to source any of its  
24 talcum powder products?

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1           A.       Yeah. I mean, it was not  
2       decades, but it was -- it was years  
3       afterwards.

4           Q.       Okay. And you agree you  
5       cannot test a rock -- well, never mind.

6                    You have never worked for a  
7       mining company, according to your CV,  
8       correct?

9           A.       Yes, I've never been on the  
10      payroll, like, as an employee. I've  
11      worked as a consultant, but never as a --  
12      never as an employee of a mining company.

13          Q.       Okay. What mining companies  
14      have you worked as a consultant for?

15          A.       That's privileged  
16      information. I'm not going to share it.

17          Q.       Okay. So you have not --  
18      you're not able or willing to tell me in  
19      this deposition which mining companies  
20      you have acted as a consultant for?

21          A.       No. That is privileged and  
22      confidential information.

23          Q.       Okay.

24                   MR. OLIVER: All right.

1 Kevin, I understand his position,  
2 but we're going to hold the  
3 deposition open on that -- at  
4 least as to that particular issue.  
5 I'm not saying it's going to be a  
6 big deal. I'm just saying I want  
7 to make sure everybody has  
8 their -- has their opportunity to  
9 ask the questions of Dr. Sanchez  
10 that need to be asked, and you  
11 know as well as I do, I don't  
12 think he can really refuse to  
13 answer that question, but it may  
14 not be a big deal. We'll find out  
15 later.

16 MR. HYNES: Well, it appears  
17 that you may be invading  
18 consulting expert privilege  
19 relating to an entity that is not  
20 here present at today's deposition  
21 and so I would oppose the request  
22 to keep the deposition open to  
23 invade a potential consulting  
24 expert privilege issue.

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1                   MR. OLIVER:   You're the one  
2                   who put him up as a mining expert.  
3                   So if he can't tell me what his  
4                   expertise is based on, it's better  
5                   for my case anyway.   So you guys  
6                   do whatever you want to do.

7       BY MR. OLIVER:

8                   Q.       All right.   So other than  
9                   these unnamed consulting gigs that you  
10                  have for mining companies, do you have  
11                  any other experience being employed by a  
12                  mining company other than the one that  
13                  you can't tell me, Dr. Sanchez?

14                  A.       Everything I have done that  
15                  I can disclose I have disclosed in the  
16                  litigation.   I have -- I did consulting  
17                  work with, for example, Imerys and I went  
18                  to the Val Germanasca mine.   I produced a  
19                  report back in 2016 of that visit.   All  
20                  of that is disclosed as it's relevant  
21                  to -- to this case or clients that I  
22                  worked for in litigation.

23                  Q.       All right.   You don't have  
24                  any formal educational training in the

1 mining industry, do you?

2 A. I'm not sure what you mean  
3 by that, but if you're ask -- I'm just  
4 trying to clarify here. If you're asking  
5 whether or not I was -- I was ever  
6 trained as, like, a mining engineer, no,  
7 that is not my degree. Mine is in  
8 geology and mineralogy. I did take some  
9 mineral processing classes as an  
10 undergraduate in college, but again,  
11 my -- my consulting and my work for any  
12 company is based upon analytical testing,  
13 mineralogy and geology.

14 Q. Okay. So you never designed  
15 a process to sort talc, extracted talc  
16 for processing? You've never designed  
17 such a process?

18 A. Personally, no. I've seen  
19 the process as it's been designed at  
20 different mines, for example, Val  
21 Germanasca and Guangxi, and described  
22 that, and I've also tested samples as a  
23 result of that processing both before and  
24 after.

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1           Q.       Have you ever -- you've  
2       never designed a beneficiation process  
3       whereby talc is ground up for use in  
4       cosmetic products, correct?

5           A.       No.   I have evaluated talcs  
6       that have gone through that process.

7           Q.       Have you reviewed the  
8       documents outlined in the beneficiation  
9       process that Johnson & Johnson used  
10      during the relevant time periods of this  
11      litigation to produce Johnson's baby  
12      powder?

13                  MR. HYNES:   Vague,  
14      overbroad.

15                  THE WITNESS:   I'm generally  
16      familiar with their processing,  
17      but the specifics or whether I've  
18      seen all of the documents I can't  
19      speak to.

20   BY MR. OLIVER:

21           Q.       Okay.   Are any of those  
22      documents listed on your -- strike that.

23                  If you reviewed a document  
24      regarding the beneficiation process of

1 Johnson's baby powder, would it be on  
2 your materials considered and relied on  
3 list?

4 A. Yes. I believe all  
5 documents supplied to me by Johnson &  
6 Johnson are there. I have memory of  
7 viewing documents that discussed  
8 testing -- testing regime or testing  
9 processes both before the mill, at the  
10 mill, before the flow feed, before the --  
11 you know, at different stages of the  
12 beneficiation process where they're  
13 testing the materials as well as the  
14 final stage, which was TEM tests sent out  
15 to McCrone for that final -- the final --  
16 the final test on those products. So in  
17 the context of the testing, which I have  
18 seen documents that detail out which  
19 steps of the process that they're looking  
20 at. Those are what come to mind. I  
21 couldn't point to them without, you know,  
22 having reviewed them all.

23 Q. In other words, you're not  
24 able to write a report on how the



1       beneficiation process works or you  
2       couldn't list out for somebody in an  
3       industrial setting how the beneficiation  
4       happens?

5                       MR. HYNES:   Vague,  
6       overbroad.

7                       THE WITNESS:   No, I could --  
8       I could describe that process.  
9       You know, they would use different  
10      re-agents for the flotation. I  
11      don't recall what those are off  
12      the top of my head, but the way  
13      that that was processed I've seen  
14      in the documents. The way that  
15      the materials were screened, the  
16      different steps of that process  
17      were there.

18      BY MR. OLIVER:

19                      Q.       So is it fair to say that  
20      what you know about Johnson & Johnson's  
21      beneficiation process you -- you got from  
22      reading their documents; is that fair?

23                      A.       That's correct.

24                      Q.       You never had any sort of

1 on-the-job training with regard to  
2 beneficiation?

3 A. Again, I've not personally  
4 gone through in a mine. However, I am  
5 familiar with beneficiation as a concept  
6 and different types of beneficiation  
7 through training, education and  
8 experience. I've been to -- I've been to  
9 mills that use flotation cells, different  
10 re-agents, and I was familiar with that  
11 process before I went to the mills based  
12 on education. I wouldn't say that. And  
13 I've described to the best of my  
14 ability -- well, I've described in my  
15 reports the kind of steps that are used  
16 for the beneficiation and I've testified  
17 to that based on what I've observed.

18 MR. OLIVER: I think we're  
19 going to take a really brief break  
20 to eat something. It's not going  
21 to take long. So I'm going to try  
22 to come back here at 1:20, if  
23 that's okay, or what time are we  
24 on?

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1 I'm sorry. It would be 2:20  
2 my time. So 20 minutes from now.

3 THE WITNESS: Okay.

4 MR. HYNES: 1:20. You're on  
5 East Coast time. It's 1 o'clock.

6 MR. OLIVER: Yep. All  
7 right.

8 (A short recess was taken  
9 from 12:59 p.m. until 1:24 p.m.)

10 BY MR. OLIVER:

11 Q. Dr. Sanchez, when we left  
12 for a short break, we were talking about  
13 your experience in the area of mining.

14 Before being employed by  
15 J&J, had you ever taken a class on talc  
16 mining?

17 MR. HYNES: Objection to  
18 form, employed by J&J.

19 THE WITNESS: No, I've  
20 not -- I've never even -- yeah,  
21 that's too specific of a kind of  
22 class.

23 My experience with talc  
24 mining specifically comes from

1           being to mines and analyzing  
2           samples from mines, not -- not  
3           through schooling.

4       BY MR. OLIVER:

5           Q.       So all of your experience  
6           with talc and talc mining relates  
7           specifically to your contingent as a  
8           consultant to Johnson & Johnson, fair  
9           enough?

10                  MR. HYNES:   Overbroad,  
11                  vague.

12                  THE WITNESS:   No, that's  
13                  incorrect.

14       BY MR. OLIVER:

15           Q.       Dr. Sanchez, did you ever  
16           take -- you already told me you never  
17           took a class on talc mining when you were  
18           in school, right?

19           A.       I took no course that had  
20           the label talc mining, that's correct.

21           Q.       And you told me that the  
22           only -- the only thing you learned or the  
23           way you learned about talc was from your  
24           testing of talcum powder-related

1 materials in litigation, right?

2 MR. HYNES: Overbroad.

3 THE WITNESS: That's  
4 inaccurate. As it deals with the  
5 mineral talc I learned about talc  
6 in school. It's a mineral. I  
7 covered issues and I understood  
8 what talc was. I knew what it was  
9 through education.

10 My experience with actual  
11 talc mining comes through  
12 experience as a professional  
13 working outside of school, but my  
14 knowledge of what talc is and what  
15 minerals are predate any of my  
16 professional work.

17 BY MR. OLIVER:

18 Q. That's right. But the only  
19 thing you know about talc mining you  
20 learned from your professional work,  
21 correct?

22 A. As part of my -- yes, work  
23 that I've done on behalf of companies.  
24 As you get into specific issues of, like,

1        talc mining, yes.

2                    Q.        Other than -- we talked  
3        briefly about hand sorting. First of  
4        all, would you agree that hand sorting is  
5        performed by miners, correct?

6                    A.        That's accurate, yes.

7                    Q.        Okay. And you have never  
8        actually hand sorted talc from anything  
9        in a mining setting, correct?

10                   A.        That's incorrect. In the  
11        instances where I've been to talc mines,  
12        as I described in Val Germanasca, I saw  
13        the process and I myself sorted talc to  
14        make sure I understood the process, but  
15        outside of that, no, I've never -- I've  
16        never sat for eight hours a day, or  
17        whatever the shifts would be, and worked  
18        as somebody that was sorting talc as a  
19        job, but again, I've seen it observed and  
20        then I -- and in order to make sure I  
21        understood the process of what they were  
22        doing, I also recreated what they were  
23        doing and have them say yes, that is what  
24        we do.

1                   Q.       How long did that -- well,  
2       first of all, was that in Val Chisone?

3                   A.       Yes.

4                   Q.       And that was in your 2015  
5       visit?

6                   A.       Yes. As I was understanding  
7       how they processed the talc, yes, that  
8       was part of that visit.

9                   Q.       Okay. And you didn't do  
10       anything with hand sorting in the Vermont  
11       talc source, right?

12                  A.       That's correct.

13                  Q.       And you never saw any  
14       Johnson & Johnson document from the  
15       Vermont era of talc sourcing talking  
16       about how the hand sorting process was  
17       done, right?

18                  A.       Other than it was done, but  
19       no, there was no -- I don't recall a  
20       document that was -- would have been as  
21       specific as seeing it done and  
22       understanding how they were doing it.

23                  Q.       And in China when you  
24       visited the Guangxi mine, did you do

1 anything with hand sorting in the Guangxi  
2 location?

3 A. Yes.

4 Q. What did you do there?

5 A. Same thing. I observed the  
6 processing from start to finish. I also  
7 sorted some myself to make sure I was  
8 understanding what their requirements  
9 were for the talc ores that were going on  
10 versus ones that were being thrown out.

11 Q. Okay. So let's start  
12 with -- I'm talking about Val Chisone  
13 now, not Guangxi.

14 When you're in Val Chisone,  
15 first of all, you never interviewed any  
16 miner, obviously, who mined the talc for  
17 J&J in Val Chisone, right?

18 A. So I did speak with miners  
19 and people at the mill, but yes, none of  
20 them were employed back, I think, in 1967  
21 when I was there. None of them. Yeah,  
22 that would -- it's too long ago.

23 Q. So the only people you  
24 talked to were current employees of the



1 Val Chisone mining operation, right?

2 A. With the exception of a  
3 retired -- the retired mine manager who  
4 started working there I believe in the  
5 early '80s. And then also looking at --  
6 there were historical documents and  
7 photographs available that I observed as  
8 part of that visit that go back I think  
9 as early as the 1940s.

10 Q. Did you review any document  
11 that listed the details of how talc was  
12 hand sorted at Val Chisone when Johnson &  
13 Johnson was using it as a talc source?

14 A. Nothing with great  
15 specificity. Just simply looking at the  
16 images, the processing. It was a similar  
17 process. Again, they were using newer  
18 equipment, but there was the same -- the  
19 same process was -- was in place.

20 Q. But you didn't review any  
21 document from the relevant time period  
22 talking about how they hand sorted then,  
23 correct?

24 A. I did not see a document

1 with detailed explanations from -- from  
2 the 1950s or '60s, that's correct.

3 Q. So you don't know anything  
4 about the training, for example, that the  
5 miners got in Val Chisone on how to --  
6 how to hand sort talc?

7 A. I did not see documents to  
8 that nature. Again, I observed the  
9 miners that were working when I was there  
10 doing it, but other than that, everything  
11 else is left to the photographic evidence  
12 of historical processing that I  
13 observed -- that I saw, which was --  
14 which was a similar process.

15 Q. How long -- well, describe  
16 this for me. Is the talc coming out on a  
17 conveyor belt? How are they hand sorting  
18 it?

19 Describe that process. What  
20 did you observe?

21 A. Well, there's multiple  
22 stages of it, but they -- in Val  
23 Germanasca, it's underground mining.  
24 They -- they open up what they call the

1 galleries, which is where the talc ore  
2 is. They start to remove the talc from  
3 the galleries and as they remove it, they  
4 continually break it down into smaller  
5 pieces.

6 Q. Well, let me -- let me back  
7 up because I want to get to that.

8 All right. So they open up  
9 the gallery. How do they remove -- is  
10 there a sheer wall of rock? Is that what  
11 it is?

12 A. Well, yeah, you're -- it's  
13 solid rock, yes.

14 Q. Okay. And how do they  
15 remove the rocks from the wall?

16 A. There is a -- there's a  
17 blasting process that happens. They  
18 drill holes in a grid pattern into the  
19 talc ore. They then -- they do a blast  
20 which loosens up the rock and creates  
21 fractures between the holes. That  
22 material is then -- with mechanical  
23 equipment is removed out and people look  
24 through that material and they break that

1 material into smaller pieces. And so  
2 there's -- the first stage of sorting  
3 happens right there at the mine face.  
4 The material that is not the talc ore  
5 stays -- stays there, gets put into older  
6 areas of the mine and backfilled. The  
7 material that -- that looks to be --  
8 passed and goes to the next stage then  
9 gets removed in small trucks out to a  
10 staging area outside. That material is  
11 graded. That material is further broken  
12 into smaller pieces and non-talc rock is  
13 removed all along the processing.

14 Q. How many holes do they drill  
15 per session to put explosives in them?

16 A. I don't recall. I don't  
17 believe I counted them.

18 Q. Okay. Well, I mean, is it 2  
19 or is it 20? Just give me an idea of  
20 what you saw.

21 A. It's more than two. They  
22 need to create kind of a grid pattern and  
23 it is not a -- it is not a large blast by  
24 any means, but it -- the blast is

1       designed to fracture the rock so they can  
2       dig and work with it.

3               Q.       What explosive do they use?

4               A.       I'm not sure.

5               Q.       Did it look -- was it like a  
6       stick of dynamite or were they using some  
7       kind of plastic explosive?

8               A.       I did not see them load the  
9       holes with any -- with the explosive, so  
10       I don't know. There's obviously blasting  
11       caps of some nature and then wires as  
12       part of it, but I don't -- I don't know  
13       that.

14              Q.       Did you actually see the  
15       blast?

16              A.       No. That would be  
17       impossible. I saw areas that were ready  
18       to be blasted and I saw areas after the  
19       blast.

20              Q.       Okay. How soon after the  
21       blast did you see the areas?

22              A.       I'm not sure. I don't know  
23       if it was days or --

24              Q.       I'm sorry. What?

1                   A.       I don't know if it was days  
2       or weeks. I don't know the time frame.  
3       I don't recall.

4                   Q.       It wasn't hours?

5                   A.       It could have been. I just  
6       don't know.

7                   Q.       Okay. When you saw the area  
8       after the blast, the air was not filled  
9       with dust, was it?

10                  A.       There's always a small  
11       amount of dust in the air in the mines.  
12       I don't -- but again, without seeing a  
13       video of the actual blast, I don't know  
14       how much dust would even be created in it  
15       to be able to assess that.

16                  Q.       Do you know how far into the  
17       rock wall the blasting material was  
18       placed?

19                  A.       The total depth, no. Based  
20       on the volume of material that I saw that  
21       was loosened up, it probably would have  
22       been at least a meter, if not a couple  
23       meters worth of depth.

24                  Q.       Okay. So anywhere from --

1 I'm a golfer. So I don't like meters. I  
2 like yards.

3 Anywhere from a yard to  
4 three yards. Anywhere from a meter to  
5 three meters; is that fair?

6 A. Yeah, I'm kind of doing  
7 conjecture just on memory of the size,  
8 like how much material was loose and that  
9 they were then, you know, digging out and  
10 working through. It was -- it was a  
11 couple meters or a couple yards at least.

12 Q. And obviously, you don't  
13 know what the -- if you're looking at the  
14 Val Chisone sheer wall, you can't see  
15 what's three meters past the face of the  
16 wall, right?

17 A. Not until you -- yeah, not  
18 until you blast it and you're sorting  
19 through it.

20 Q. Okay. So when the explosive  
21 is put into -- I'm sorry.

22 A. They do what they call drill  
23 coring before -- before they do any  
24 blasting because they want to understand

1        what material they're getting into. So  
2        they do have a knowledge of what -- of  
3        what is there before they go in and mine  
4        it. I mean, in order for them to know  
5        where the talc is underground, they have  
6        to do exploratory work for that, but  
7        until -- but the real granular specific  
8        level you won't know until you start  
9        processing that material and breaking it  
10       all up.

11                Q.        Right. And so you don't  
12       know for certain what you got until the  
13       blast is over and the pieces are on the  
14       ground, right?

15                A.        I would say you have a very  
16       good idea, but you don't -- you don't  
17       know absolutely until -- until you can  
18       look at it all.

19                Q.        And, in fact, the fact that  
20       people have to sort rocks means that  
21       everything is not pure talc, right?

22                        I mean, they have to take  
23       out the stuff that's not pure talc,  
24       correct?



1           A.       Yeah, there's other --  
2       there's other inclusions within the talc  
3       ore that they remove.

4           Q.       And one of the inclusions  
5       that could be in the talc ore could be  
6       amphibole material, true?

7           A.       True. There are -- some of  
8       the inclusions contained on asbestos  
9       tremolite as documented in the literature  
10      and by testing.

11          Q.       And some of the inclusions  
12      contain serpentine mineral, too?

13          A.       That's incorrect. I've not  
14      found serpentine inclusions in that  
15      material.

16          Q.       You mean in the Val Chisone  
17      material?

18          A.       Correct.

19          Q.       Is it your testimony that  
20      because you haven't found it, there have  
21      never been serpentine inclusions in the  
22      Val Chisone talc mines?

23          A.       The geology is wrong for  
24      serpentine. There's no serpentinites in

1       proximity to the talc, so to find  
2       serpentine minerals would -- would not be  
3       expected. The actual literature that is  
4       specific and the detailed results looking  
5       at that issue did not find any -- any  
6       serpentine.

7               Q.       So back to our mining  
8       process.

9                       When you blast the rocks or  
10       the pieces of rocks off the face of the  
11       wall, it's going to create a certain  
12       amount of particulate matter from  
13       whatever rock you're blasting off the  
14       wall, right?

15              A.       Some amount.

16              Q.       And do the miners wear  
17       respirators when they're doing this?

18              A.       When I saw the mining  
19       processes, they were not wearing  
20       respirators. When I spoke with the mine  
21       managers and others about respirators,  
22       when they wear them, they wear them when  
23       the dust levels exceed a certain amount  
24       according to regulation. They also

1 typically wear them when they're mining  
2 the non-talc rock, when they're trying to  
3 open up the galleries because those rocks  
4 are enriched in quartz and so they're  
5 worried about quartz exposures in that  
6 rock for silicosis issues, but the actual  
7 miners themselves as I saw them working  
8 in the functions I saw, they were not  
9 wearing respirators.

10 Q. Do they have a mask on?

11 A. No. They were not wearing  
12 any type of respirator.

13 Q. Do you know how the process  
14 that you observed changed from the time  
15 in the 1950s and '60s when Johnson &  
16 Johnson was using Val Chisone to the time  
17 you observed it?

18 A. No. The only -- the only  
19 changes that I was made aware of when I  
20 was asking those types of questions  
21 was -- for example, when I was there,  
22 they had mechanical like -- they had,  
23 like, robotic-assisted mechanical  
24 equipment to move around the talc ores

1 and break them up at the mine face. They  
2 wouldn't have had those in the 1960s.  
3 They would have been doing all that with  
4 hand drills and by hand that they now  
5 have pneumatic and robotic controlled  
6 machinery for. So the act of the  
7 processing and how they do it have not  
8 changed, but some of the, you know,  
9 technology of the tools may have changed.

10 Q. Do you know if the explosive  
11 process that they used changed?

12 A. I don't know. Again, I  
13 don't -- whether they changed the type of  
14 explosive over time, I can't speak to  
15 those issues.

16 Q. Do you know when they  
17 changed from using hand labor to break up  
18 the rocks to pneumatic hammers?

19 A. Well, it's not pneumatic  
20 hammers. They literally had like -- they  
21 had robotic arms with pneumatic hammers  
22 on them. So the guys were there with,  
23 like, controlling units moving this arm  
24 around to break up the rock instead of

1 climbing up there and physically holding  
2 the pneumatic hammer. So they were using  
3 pneumatic-type hammers even back -- even  
4 back in the, you know, '50s and '60s.  
5 The issue was the robotic nature of the  
6 control of those hammers. At some point  
7 it changed, but I don't know the year.

8 Q. I'm going to show you some  
9 pictures of -- let me back up.

10 I asked you a lot of  
11 questions about the rock wall mining  
12 process in Val Chisone. You didn't see  
13 any of what you just described for us in  
14 the Vermont mines, correct?

15 A. That's correct. I have not  
16 been -- I've not seen the talc in  
17 Vermont. I have not been to those mines  
18 to observe how they do it today. And  
19 again, the processing in the past would  
20 have been different. They had different  
21 processing for the cosmetic grades that  
22 they ceased doing, you know, 20 years, 20  
23 plus -- about 20 years ago.

24 Q. So for the Guangxi mines,

1 did you observe them blasting?

2 A. Yes.

3 Q. Okay. Did you actually see  
4 the explosions?

5 A. Yes.

6 Q. Okay. And that's because  
7 that's a pit mine; am I right?

8 A. That's correct.

9 Q. Okay. So how far away were  
10 you when you watched them do the blasting  
11 in the pit mine?

12 A. Oh, I don't know. I was up  
13 on some higher benches. At least a  
14 hundred yards, at least. I can't say  
15 with certainty, though, but it was -- it  
16 was farther away.

17 Q. Did you wear a hard helmet  
18 when you were there?

19 A. Yeah, when I -- both in Val  
20 Germanasca and in other mines. When  
21 you're in the mining environment, you  
22 wear hard hats.

23 Q. Did you wear a mask or a  
24 respirator when they were blasting in

1 Guangxi?

2 A. No.

3 Q. Did they require you to wear  
4 a mask or a respirator at any point while  
5 you were in Guangxi?

6 A. No.

7 Q. Did you witness the miners  
8 wearing masks or respirators at any  
9 point?

10 A. Only -- only those that were  
11 working in the mill filling bags were --  
12 were wearing respirators.

13 Q. And the reason for that is  
14 because that's a high dust environment?

15 A. Yes.

16 Q. When you watched the  
17 explosion, how big an area, roughly, did  
18 that cover in Guangxi?

19 A. Not a large area. I  
20 think -- again, I'm going from memory and  
21 trying to do my best on distances. I  
22 didn't go mark it out.

23 The one I -- the ones that  
24 I've seen were probably maybe 30 to 50

1 feet sections of the wall.

2 Q. How much dust did it create  
3 when there was an explosion on the 30 to  
4 50 feet of wall you were watching?

5 A. Very little.

6 Q. What type of explosive were  
7 they using? Do you know?

8 A. I didn't ask.

9 Q. Did the rocks fall off of  
10 the wall or did they merely create  
11 fissures in the wall?

12 A. Mainly -- mainly fissures.  
13 Some of the ones at the edge may have  
14 fallen down, but it's -- the idea of the  
15 blasting is to just loosen the rock up,  
16 create fissures so they then can process  
17 and work through.

18 Q. And how did they take the --  
19 after the explosion, did somebody take  
20 those pieces of rock off by hand or did  
21 they take them off by robotic arm, as  
22 you've described, or robotic equipment?

23 A. The open pit mine they're  
24 using, like, trackhoses.



1 Q. You said trackhoes?

2 A. Right.

3 Q. Like something that's going  
4 to scrape, like with an arm and it's  
5 going to scrape off the side of the wall?

6 A. Correct.

7 Q. Okay. And when that  
8 happens, we've all seen that, the rock  
9 would fall off and there's going to be  
10 some dust created in that process, true?

11 A. Some, but the environment,  
12 at least the years -- the times of year  
13 I've been there has been pretty wet.  
14 There's not much dust in the air. I  
15 don't know if it's in the summer, but  
16 it's a sub -- I mean, you're -- you're --  
17 it's pretty -- I don't know if it's  
18 considered tropic, but it's not -- it's  
19 not a very dry environment. There's a  
20 lot of rain and a lot of water.

21 Q. Did you look at any  
22 documents from the Guangxi mine that  
23 talked about how the miners are trained  
24 to sort talc?

1                   A.       No.    I've just seen what  
2       they do.

3                   Q.       And do you have any idea how  
4       they're trained?

5                   A.       Not -- not specifically.  
6       Most of the miners live up there, work up  
7       there.  I think they're just -- you know,  
8       they'd just be trained by experience of  
9       those that have more experience than  
10      them, than the new ones would be my  
11      guess.

12                  Q.       If there's a document  
13      talking about how miners are trained to  
14      hand sorting in Guangxi, you've never  
15      seen it?

16                  A.       No, I've not seen that kind  
17      of documentation.

18                  Q.       You've never interviewed  
19      anybody about it either, have you?

20                  A.       I've been there and I've  
21      spoken with those that do it.  I've  
22      recreated what they do to make sure I  
23      understood how they were sorting it based  
24      on the color and the physical properties

1 of the rocks, but other than that, that's  
2 my experience with it. Also taking those  
3 materials and, you know, testing them.

4 Q. Jump back to Val Chisone  
5 real quick. I forgot to ask you a  
6 question.

7 Did you ever talk to anybody  
8 at Johnson & Johnson about the specific  
9 mining processes that were in place in  
10 Val Chisone during the time they were  
11 sourcing from there?

12 A. No. My work at Val Chisone  
13 predated any of my work for Johnson &  
14 Johnson.

15 Q. You went to Val Chisone  
16 before you had been retained by Johnson &  
17 Johnson?

18 A. Yes. I didn't start doing  
19 expert work for Johnson & Johnson until I  
20 think the year 2017 time frame.

21 Q. Well, you went to Val -- let  
22 me just clearly understand.

23 You went to Val Chisone as  
24 part of your job at RJ Lee, correct?

1           A.       I was working for RJ Lee  
2       Group at the time, yes. It was  
3       consulting work that I had said I was  
4       contacted about and worked up and  
5       performed.

6           Q.       Who was your client that  
7       sent you to Val Chisone?

8           A.       I already testified to this.  
9       It was Imerys Talc America.

10          Q.       Was Imerys the predecessor  
11       in interest to the company that was doing  
12       the mining in Val Chisone called SVC? I  
13       think they ran it when Johnson & Johnson  
14       was sourcing there.

15          A.       I don't know the business  
16       end.

17          Q.       So did you know that the  
18       company that controlled the mine while  
19       Johnson & Johnson was sourcing from Val  
20       Chisone was called SVC?

21          A.       I thought it was the Talc  
22       and Graphite Company of Val Chisone. Is  
23       that what you're referencing?

24          Q.       I don't know. Is that who

1       you think controlled it?

2               A.       Well, there was a Talc  
3       Graffiti de la Venture or something. You  
4       know, I don't speak Italian. They --  
5       there was a family owned company that ran  
6       it for many years before it was sold off  
7       to some other entity. I don't -- I don't  
8       know -- I don't know that history.

9               Q.       Bottom line is you never  
10       talked to anybody who was employed by the  
11       company that actually did the mining in  
12       the relevant time period for Johnson &  
13       Johnson, right?

14              A.       That's correct.  
15       Everyone I -- no one I spoke to had  
16       worked there in the 1950s or '60s.

17              Q.       Okay. So none of them could  
18       tell you anything about what went on  
19       there in the 1950s and '60s based on  
20       firsthand knowledge?

21              A.       Based on -- that's correct,  
22       based on firsthand knowledge.

23              Q.       Let's look at these  
24       pictures.

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1 MR. OLIVER: Katy, can we  
2 pull up the -- we'll mark as  
3 Plaintiffs Exhibit 7 this release  
4 from the University of California  
5 Division of Agriculture and  
6 Natural Resources.

7 MR. HYNES: Counsel, is  
8 there a copy of that in the  
9 redweld?

10 MR. OLIVER: You know what,  
11 unfortunately, Kevin, there's not.  
12 We're going to display it on the  
13 screen.

14 BY MR. OLIVER:

15 Q. So, Dr. Sanchez, don't go  
16 looking in your folder for that, and I  
17 apologize for that. It's not because I  
18 was trying to make it a pain for you. I  
19 just didn't get to it in time.

20 First of all, Dr. Sanchez,  
21 have you ever seen this document before?

22 A. I may have years ago. I  
23 don't -- I don't know for sure.

24 Q. Okay. You agree this

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1 appears to be an August 2009 release from  
2 the University of California Division of  
3 Agriculture and Natural Resources,  
4 correct?

5 A. Okay.

6 Q. Do you agree that's what it  
7 appears to be?

8 A. That's what it appears to  
9 be, yes.

10 Q. Okay. And you're familiar  
11 with the University of California  
12 Division of Agriculture and Natural  
13 Resources, correct?

14 A. I know it exists. I can't  
15 say I'm familiar with it or...

16 Q. So let me direct your  
17 attention to the second full paragraph  
18 beginning with most ultra -- can you help  
19 me pronounce that? I know you know how  
20 to pronounce it and I don't.

21 A. Ultramafic.

22 Q. Ultramafic. Thank you, Dr.  
23 Sanchez.

24 Most ultramafic rock,

1 including serpentine (sic), contain  
2 naturally occurring asbestos particles.  
3 Microscopic needlelike particles of  
4 asbestos or asbestos-like fibers.

5 First, did I read that  
6 sentence correctly?

7 A. You did.

8 Q. Okay. Would you agree that  
9 Vermont talc formations result are  
10 ultramafic? Is that correct, or not?

11 A. Ultramafic.

12 Q. Ultramafic. I'm going to  
13 mess that up all day.

14 Are the rock formations  
15 around the Vermont talc mines ultramafic?

16 A. They are. Well, the  
17 protoliths for the talc mines or one of  
18 protoliths is ultramafic rocks, yes, but  
19 then there's surrounding rock, the  
20 country rock, as they term it, that is  
21 not.

22 Q. You agree that serpentine is  
23 an ultramafic rock?

24 A. It would be classified under



1 the larger umbrella ultramafic rock, yes.

2 Q. And you agree that  
3 serpentine contains naturally occurring  
4 asbestos particles?

5 A. Serpentine, just for  
6 clarity.

7 Q. I'm sorry.

8 A. Serpentine is composed of  
9 primarily serpentine minerals, but yes,  
10 serpentinites would be considered  
11 ultramafic rocks.

12 Q. And it would, in some  
13 instances, contain naturally occurring  
14 asbestos particles, right?

15 A. Yeah, you can -- like the  
16 major chrysotile deposits up in Canada  
17 are all derived from serpentinite rocks,  
18 things of that nature, as well as the --  
19 yeah. I mean it's -- chrysotile is most  
20 commonly found in those types of rocks.

21 Q. So that sentence is an  
22 accurate sentence under -- based on your  
23 expertise?

24 MR. HYNES: Misstates

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1 testimony.

2 THE WITNESS: I'm sorry. I  
3 couldn't tell if you said accurate  
4 or inaccurate?

5 BY MR. OLIVER:

6 Q. I said accurate. Is that  
7 sentence that we just read accurate?

8 MR. HYNES: Misstates  
9 testimony.

10 THE WITNESS: There's other  
11 ultramafic rocks that have not  
12 been serpentized or altered that  
13 I don't think that's accurate for,  
14 but serpentinites can contain  
15 naturally occurring asbestos. I  
16 do agree with that, yes.

17 BY MR. OLIVER:

18 Q. The last sentence of the  
19 document -- excuse me, of the paragraph  
20 says, the most common naturally occurring  
21 asbestos particle in ultramafic rocks is  
22 chrysotile.

23 Do you agree with that  
24 statement?

1           A.       From a general perspective  
2       that could be accurate, but again, it  
3       could vary on specific localities or  
4       depending on what scale or spacial  
5       resolution you want to be looking up, but  
6       if ultramafic rocks have been  
7       serpentinized, then chrysotile could be  
8       present in those serpentinized ultramafic  
9       rocks.

10          Q.       Now, down in the lower  
11       left-hand corner there's a picture,  
12       Figure 1, that says, serpentine rock with  
13       veins of naturally occurring asbestos,  
14       and it says the source is the EPA's  
15       naturally occurring asbestos website.

16                   Do you see that?

17          A.       Yes.

18          Q.       Do you agree -- first of  
19       all, you don't have any reason to doubt  
20       that that is what they claim it is,  
21       correct?

22          A.       That looks like chrysotile  
23       occurrence in a serpentinite rock, yes.

24          Q.       And so you agree that that

1 is an accurate representation of a  
2 serpentine rock and those white veins  
3 within the middle would be naturally  
4 occurring asbestos veins, correct?

5 A. Not all of them, but there's  
6 definitely some in there from this scale  
7 that look like cross-fiber chrysotile  
8 occurrences. There's other white veins  
9 in there that could simply be calcite or  
10 other minerals.

11 The fact that there's veins  
12 in the rock doesn't mean the veins are  
13 composed of asbestos, but there are veins  
14 there that do look like cross-fiber  
15 chrysotile.

16 Q. And to me it sort of looks  
17 like a steak that's marbled, right? I  
18 mean that's kind of what it looks like?

19 A. Okay.

20 Q. I mean, do you agree that's  
21 kind of what it looks like?

22 A. Not -- I mean not entirely,  
23 but this particular rock does have other,  
24 like, veiny material that you can see.

1       There appears to be at least two  
2       different mineralizations in the veins.  
3       One of the mineralizations looks like  
4       cross-fiber chrysotile. The other veins  
5       look like some other material to me from  
6       this -- from what I can see here.

7               Q.       And my question is: This is  
8       a common presentation of how naturally  
9       occurring asbestos would be veins  
10       throughout the non-asbestiform analog for  
11       that mineral, right?

12               MR. HYNES: Vague,  
13       overbroad.

14               THE WITNESS: When asbestos  
15       forms in nature, it does form in  
16       cross-fiber veins like this and  
17       slip fiber veins, but it still  
18       occurs -- it's going to occur in  
19       localized areas. So to take this  
20       rock picture that does show what  
21       appears to be cross-fiber veins of  
22       chrysotile and then say that all  
23       serpentine everywhere would look  
24       like that would be inaccurate.

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1                   For example, the rock found  
2                   in the UN General Assembly,  
3                   there's a green material behind  
4                   the speakers. That green material  
5                   is serpentinite rock. That  
6                   doesn't mean that that material in  
7                   the UN building behind the world  
8                   leaders when they give speeches  
9                   there contains chrysotile asbestos  
10                  as illustrated in this rock. You  
11                  can --

12       BY MR. OLIVER:

13                  Q.       That's fine. I wasn't  
14                  suggesting that, Dr. Sanchez.

15                        I just -- all I really want  
16                  to know, this is a common presentation of  
17                  how chrysotile asbestos mixed in with  
18                  other non-asbestiform serpentine might  
19                  look, right?

20                        MR. HYNES: Same objections.

21                        THE WITNESS: This is a good  
22                  representation of what the  
23                  asbestiform growth sample looks  
24                  like in a hand sample, yes.

1 BY MR. OLIVER:

2 Q. Thank you. Great.

3 MR. OLIVER: Katy, can we  
4 put up the image which is the  
5 tremolite with the talc seam in  
6 it?

7 BY MR. OLIVER:

8 Q. Now, Dr. Sanchez, I put on  
9 the screen what I'll represent to you is  
10 a piece of tremolite with similar seams  
11 or veins of material, and I'll represent  
12 to you that those veins of material are  
13 talc.

14 Does that appear to be a  
15 good explanation of what you see here?

16 A. No. I would -- I would  
17 need -- this looks like it could be  
18 anything to me. I would have to see data  
19 to support what you put forward.

20 Q. Okay. So just looking at  
21 this with your naked eye, you can't tell  
22 what this is, right?

23 A. Other than it looks to be a  
24 rock that's been cut with a saw.

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1                   Q.       Okay.  So you don't know if  
2       it's tremolite and you don't know if it's  
3       talc, right?

4                   A.       I would have -- yeah,  
5       there's -- there's -- I have no ability  
6       looking at this image to make any such  
7       statements.

8                   Q.       Why wouldn't you have any  
9       such ability?

10                  A.       Because we don't simply look  
11       at rocks and can tell what's always in  
12       them.  If I had the rock in hand, I could  
13       do simple tests that would help me, but  
14       just looking at an image, all I have is  
15       what the material looks like.  There's  
16       nothing here that I see on this section  
17       that informs -- gives me any indication  
18       of what I'm looking at in any meaningful  
19       way.

20                  Q.       So that -- just having what  
21       you have to look at is simply not enough  
22       in your opinion, correct?

23                           MR. HYNES:  Vague,  
24                           overbroad.



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1 THE WITNESS: I would need  
2 more information about this rock  
3 to say anything about it other  
4 than it's a rock, it appears to  
5 have a light-colored vein of  
6 something going through it and  
7 then there's also another vein  
8 that seems to be cross-cutting the  
9 other vein, but what those -- what  
10 those mineralizations are I  
11 can't -- I can't tell from this  
12 image.

13 BY MR. OLIVER:

14 Q. Would you agree with me, Dr.  
15 Sanchez, that this could be a  
16 presentation of a talc seam through a  
17 tremolite rock?

18 A. I -- I don't know. I would  
19 need information. I don't -- I don't  
20 want -- I'm not going to sit here and  
21 make conjectures about what something  
22 could or could not be without -- without  
23 adequate information.

24 Q. Okay. It wouldn't be -- it

1 wouldn't be accurate and precise to do  
2 that based on your naked eye  
3 visualization, fair?

4 MR. HYNES: Overbroad,  
5 vague.

6 THE WITNESS: Based on the  
7 information I have here, which is  
8 simply an image, right, I can't --  
9 I can't -- I can't do anything  
10 other than to describe it as I  
11 have with the information I have.  
12 I can't do mineral identification.  
13 I can't do crystallization. I  
14 can't do with this -- with just  
15 this image.

16 BY MR. OLIVER:

17 Q. Okay. And to know whether  
18 something is asbestos and to be certain  
19 about it, you have to do all of those  
20 things you just described, right?

21 A. Well, yes. As I stated  
22 earlier, you would need to do the  
23 analytical work to identify the minerals,  
24 understand those things. This image here

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1 does not provide any of that information  
2 to evaluate and then to be able to draw  
3 conclusions from it.

4 MR. OLIVER: Okay. Katy,  
5 can we put up the next image?

6 MR. HYNES: And Counsel, are  
7 you marking these each as  
8 exhibits?

9 MR. OLIVER: Yes. I'm  
10 sorry. We should have marked that  
11 as Exhibit 8, Madam Court  
12 Reporter.

13 Thank you, Kevin.

14 BY MR. OLIVER:

15 Q. Dr. Sanchez, do you see what  
16 we're going to now mark as Plaintiffs'  
17 Exhibit 9 on the screen?

18 A. I do.

19 Q. And again, this is a piece  
20 of rock with some veins of some material  
21 throughout the rock, correct?

22 A. Yes, this appears to be  
23 cross-fiber chrysotile or a similar type  
24 of an occurrence. It looks familiar. It

1 looks similar to that when you see it in  
2 nature.

3 Q. Okay. And so the  
4 cross-fiber chrysotile or the asbestos  
5 material would be what the yellow areas  
6 are pointing at; is that fair?

7 A. Assuming that it's  
8 chrysotile, but yes, it looks like a --  
9 that's -- so chrysotile looks like that  
10 in nature.

11 Q. And so this would be an  
12 example of the asbestiform version --  
13 assume for a moment that the rest of it  
14 is just serpentine or actinolite or other  
15 serpentine mineral.

16 Is that a fair assumption  
17 based on your visualization?

18 A. I mean, it could be. When  
19 you look at serpentinites with the  
20 presence of cross-fiber chrysotile, I've  
21 seen rocks that look very similar to this  
22 in that situation.

23 Q. Okay.

24 MR. OLIVER: Katy, let's go

1 to our last one.

2 BY MR. OLIVER:

3 Q. We're going to mark this as  
4 Plaintiffs' Exhibit 9, Dr. Sanchez.

5 MR. HYNES: Was that last  
6 one 9?

7 MR. OLIVER: I'm sorry.  
8 Mark it as Exhibit 10.

9 They're trying to keep me  
10 straight here.

11 BY MR. OLIVER:

12 Q. Okay. Dr. Sanchez, I'll  
13 represent to you that I'm showing you a  
14 piece of talc rock with flecks of  
15 actinolite throughout the rock.

16 Does that appear to be what  
17 you're looking at?

18 A. Can you zoom in, please?

19 Again, I can't say with  
20 certainty, but that could be accurate  
21 based on what I see here.

22 Q. So you at least agree that  
23 that is what a piece of talc right with  
24 flecks of actinolite in it might look

1       like, right?

2               A.       Well, I'm assuming -- I'm  
3       looking at the cross -- there's --  
4       there's -- some of the darker material I  
5       can see in cross-section that look like  
6       about 6120 degree angles between the  
7       little -- the little roms, the little  
8       prisms. That would be consistent with  
9       non-asbestos amphibole growth habit, but  
10      if -- I don't know what the white  
11      material is, whether or not it's talc,  
12      but it looks like that material could  
13      be -- that could be actinolite in this  
14      rock based on the cleavage traces.

15             Q.       And looking at this with  
16      your naked eye, you don't know one way or  
17      the other whether there's asbestiform  
18      actinolite in that rock. You can't do  
19      that without doing some tests to confirm  
20      it, right?

21             A.       Well, I would need -- I  
22      would need to do testing to confirm the  
23      presence of actinolite. What I'm seeing  
24      here is I'm seeing cross-sections of

1 prisms with approximately 1620 degree  
2 angles which is consistent with  
3 amphibole -- non-asbestos amphibole  
4 crystal habits, but in order to actually  
5 know what type of amphibole or if it is  
6 an amphibole, I'd have to do analytical  
7 work. Also to determine whether or not  
8 the white mineral in here is actually  
9 talc I'd have to do analytical work, and  
10 there's -- and I'd have to see the rock  
11 in person to see if there's an  
12 asbestiform mineralization happening in  
13 the hand sample, but I can't -- from what  
14 I see here, I don't see any, but again,  
15 it's not the same without looking at the  
16 rock or seeing more analytical data from  
17 the rock.

18 Q. Dr. Sanchez, we were talking  
19 earlier about the beneficiation process,  
20 and I just want to back up and follow up  
21 on a question I had asked.

22 Have you ever sat down with  
23 anybody at Johnson & Johnson and gotten,  
24 like, an interview with them or some

1 education from them about how  
2 beneficiation of talc works?

3 A. I have not.

4 Q. Okay. Certainly you agree  
5 with me that they have many qualified  
6 people who could tell you about that,  
7 correct?

8 MR. HYNES: Calls for  
9 speculation.

10 THE WITNESS: I don't  
11 believe they do. Those  
12 individuals that were involved  
13 with this work on the Johnson &  
14 Johnson side that I saw names of  
15 in these earlier reports, like  
16 a -- like a William Ashton, it's  
17 my understanding that all those  
18 gentlemen have passed away. So I  
19 don't -- I don't know of anyone in  
20 the company today that would have  
21 any knowledge that would be useful  
22 to interview on my end.

23 BY MR. OLIVER:

24 Q. Well -- and let me -- let me



1 just ask you this. So first of all, the  
2 people like William Ashton who dealt with  
3 beneficiation during the relevant time  
4 period historically, you're saying you  
5 just don't have access to those people  
6 because they passed away, right?

7 A. He passed away is one  
8 example, yes.

9 Q. Okay. Is there another  
10 example, they moved out of the country or  
11 something? What's the other example?

12 A. Well, I mean there's some  
13 letters from people at Windsor Minerals.  
14 I don't know if any of those people are  
15 still living. Most of those documents  
16 date from the early '70s, which is 50  
17 years ago. You know, I have had a  
18 conversation with Ian Stewart who has  
19 tested talc on behalf of Johnson &  
20 Johnson from McCrone. He reiterated  
21 everything that he had already put in  
22 writing that I had previously seen in my  
23 conversation with him. So where I've  
24 been able to speak with some -- with

1 people I have. If somebody has passed  
2 on, obviously I can't -- I can't  
3 interview them or speak with them.

4 Q. Okay. And you made an  
5 important distinction. Now, I was  
6 talking about people in the present day.  
7 You talked about historical people.

8 In the present day, Johnson  
9 & Johnson certainly has living employees  
10 who worked on the beneficiation of talc,  
11 correct?

12 A. I don't know that. The --  
13 they sold -- the Windsor -- the Windsor  
14 Mineral processing materials was a  
15 subsidiary of Johnson & Johnson and that  
16 was all sold off, what, in the late '80s,  
17 so over 30 years ago.

18 Q. Okay. Well, let me -- let  
19 me back up and let's just take this piece  
20 by piece.

21 Johnson & --

22 A. Can I finish, please?

23 Q. Sure.

24 A. So the point is I don't know

1 of anybody at Johnson & Johnson that  
2 would have that knowledge or expertise  
3 from previous subsidiaries who worked on  
4 some issues maybe, you know, 40, 50 years  
5 ago. Those names that I've seen, my  
6 understanding is those -- those  
7 individuals are no longer living and for  
8 those that were living, I made -- I did  
9 make an attempt to speak to, you know,  
10 when I first started doing this work.

11 Q. And only one of the people  
12 you named is Ian Stewart. Did you talk  
13 to anybody else?

14 A. No. The other individuals,  
15 it was my understanding they were -- they  
16 had passed away.

17 Q. And Johnson & Johnson made  
18 and distributed talc-based products,  
19 talc-based Johnson's baby powder until  
20 2023, correct?

21 A. I don't know the year.

22 Q. Until very recently you  
23 agree with me that they were making and  
24 distributing talc-based Johnson's baby

1 powder in the United States, true?

2 A. Yes.

3 Q. And you agree that that  
4 talc-based baby powder went through a  
5 beneficiation process before it got into  
6 the bottles, correct?

7 A. Depending on the year and  
8 how it was processed, it would have gone  
9 through some type of beneficiation  
10 process as part of the mining, yes.

11 Q. Okay. And you didn't talk  
12 to anybody in the modern day who's  
13 affiliated with the beneficiation process  
14 for Johnson's baby powder at all is what  
15 you're telling me?

16 A. No. As I -- we've already  
17 talked about what I know of how the talc  
18 was beneficiated at the mine by a Chinese  
19 milling company. Johnson & Johnson was  
20 not there mining the talc nor were they  
21 involved in that process. So it seems  
22 like -- I just -- I don't know who I  
23 would ask or talk to because they're not  
24 the ones mining the talc. They're simply

1 purchasing the talc that's being mined.

2 Q. So when they get the talc,  
3 it's already been beneficiated?

4 A. Yes.

5 Q. And in modern day, that was  
6 done by a Chinese company?

7 A. Post -- post 2003, yes.

8 Q. And they sent you to go look  
9 at the Guangxi mines as part of your  
10 preparation for this report, correct?

11 A. No. My -- my visits and  
12 work at the Guangxi mines is not -- was  
13 never for Johnson & Johnson.

14 Q. Okay. It was for Imerys?

15 A. Hold on.

16 My only work with Johnson &  
17 Johnson related to the Chinese mine  
18 outside of litigation was testing  
19 quarterly samples starting in about 2009.

20 Q. Okay. So you did go to  
21 Guangxi, though, right?

22 A. I have been to Guangxi, yes.

23 Q. But Johnson & Johnson never  
24 sent you there?

1 A. That's correct.

2 Q. Okay. And Johnson & Johnson  
3 never put you in touch with anybody who  
4 could tell you about the modern day  
5 beneficiation process, true?

6 A. That's correct. Johnson &  
7 Johnson was not involved with that work.

8 Q. So the only information you  
9 have about how talc has been beneficiated  
10 are from historical documents from  
11 Johnson & Johnson, fair?

12 MR. HYNES: Misstates  
13 testimony.

14 THE WITNESS: From  
15 information directly from Johnson  
16 & Johnson, yes, it would have come  
17 through historical records that  
18 they would have produced for me to  
19 review. I have other knowledge  
20 outside of my knowledge of Johnson  
21 & Johnson, which I've been  
22 testifying to at some length  
23 today.

24 BY MR. OLIVER:

1           Q.     Have you ever seen any kind  
2     of list of the mining equipment that was  
3     used in the Val Chisone mines during the  
4     time that talc was being sourced there  
5     for Johnson & Johnson?

6           A.     I don't believe -- I'm not  
7     sure exactly what you're asking there,  
8     but I don't recall seeing lists of any  
9     type of equipment. So I'm not -- I'm not  
10    sure what you're asking, but I haven't  
11    seen any lists, so...

12          Q.     So other than general terms,  
13    you cannot describe -- I mean you've  
14    talked about some of the -- using robotic  
15    arms, okay, but other than that, other  
16    than those general terms, you can't tell  
17    me in any detail how the machinery has  
18    changed over time?

19               MR. HYNES:   Misstates  
20    testimony.

21               THE WITNESS:   No, I can say  
22    that the processing has stayed  
23    consistent over time. The type of  
24    machinery used to -- for

1 processing has changed. I mean it  
2 would be the same as if I used a  
3 JEOL 100CX TEM in the 1980s to  
4 analyze the sample for asbestos,  
5 but today I'm using a JEOL 1400  
6 TEM, right? I'm using a newer  
7 TEM, but I'm doing the same thing  
8 with the same -- with just a newer  
9 piece of equipment.

10 BY MR. OLIVER:

11 Q. But you agree that over time  
12 scientific processes become more precise,  
13 right?

14 MR. HYNES: Vague,  
15 overbroad.

16 THE WITNESS: Some can, but  
17 I don't -- I don't see how it's  
18 relevant in this particular  
19 instance to this mining of the  
20 talc. There was no -- there has  
21 been no -- again, our ability to  
22 do something has become easier,  
23 less labor intensive I should say,  
24 but the same process is taking out



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1           with less -- with less physical,  
2           you know, human -- human arm  
3           power, as it were, to do the work,  
4           but that doesn't mean it's more  
5           precise or less precise. That's  
6           another question.

7       BY MR. OLIVER:

8           Q.       Dr. Sanchez, in the process  
9           of using explosives to break pieces off  
10          of a talc wall that you described, if  
11          there were a deposit or a seam of  
12          asbestiform material along the lines in  
13          one of those explosions, what would  
14          happen to the fibers after the explosion?  
15          Would they be distributed into the air?

16                 MR. HYNES: Incomplete  
17                 hypothetical, calls for  
18                 speculation.

19                 THE WITNESS: Yeah, when you  
20                 have asbestos forming in rocks, it  
21                 actually creates planes of  
22                 weakness, like the rocks --  
23                 meaning the rocks want to break  
24                 along the asbestos seams. So what

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1           you would have is -- you  
2           potentially would have some  
3           release of air particulate, but  
4           you'd also have surfaces of rocks  
5           that would contain that  
6           asbestiform material. You'd  
7           literally have, like, a sheet of  
8           hairy fiber -- fiber-like material  
9           on the surfaces. That has been my  
10          experience in other instances  
11          where asbestos is in rocks.

12       BY MR. OLIVER:

13               Q.       And for those particles that  
14       went into the air, as you say, where  
15       would they end up?

16                       They would just deposit  
17       themselves after the dust settled on the  
18       rocks around them?

19               MR. HYNES:   Same objection.

20                       THE WITNESS:   It would -- it  
21       would depend on the engineering  
22       flows in the particular  
23       environment. For instance, if  
24       there's air circulation happening,

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1           the finer fibers would likely be  
2           circled out of the air, pulled and  
3           then taken. If it's a static  
4           environment, yeah, they would  
5           eventually settle.

6       BY MR. OLIVER:

7           Q.       I want to look -- actually,  
8       do you have any information about the  
9       failure rate of the beneficiation process  
10      for removing accessory minerals?

11           A.       I'm not sure I've seen  
12      anything to that effect.

13           Q.       Certainly you're not  
14      offering an opinion about it?

15           A.       No. I've not thought about  
16      that question in any meaningful way. I  
17      think the way that that could be tested,  
18      though, is simply looking at -- you'd  
19      actually be looking at the finished  
20      products sample and determining whether  
21      or not -- like what the consistency of  
22      those materials are would be the best way  
23      to test the efficiency of the  
24      beneficiation process being employed,

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1       what is the end product at the time.

2                   MR. OLIVER: I am going to  
3       shift to some Johnson & Johnson  
4       documents. I'm going to take a  
5       quick bathroom break, five  
6       minutes, and we'll be right back.

7                   (A short recess was taken at  
8       2:16 p.m. until 2:21 p.m.)

9       BY MR. OLIVER:

10       Q.       Dr. Sanchez, I'm going to  
11       move to a Johnson & Johnson document. It  
12       should be in your collection of  
13       documents. It's a 1973 letter from D. R.  
14       Petterson to D. D. Johnston, and the  
15       subject is Windsor Minerals and Talc.  
16       The date is April 26, 1973. Tell me when  
17       you've located that document.

18       A.       I think I've located it.

19       Q.       Okay. This is -- if I  
20       recall correctly, you reviewed this  
21       document before, right?

22       A.       I believe I have.

23       Q.       Okay. And is this one of  
24       the documents that's on your exhibit --

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1 on your reliance list?

2 A. I'd have to check. I don't  
3 know.

4 Q. Okay. Do you agree that --  
5 strike that.

6 You agree that Johnson &  
7 Johnson's own documents are reliable  
8 sources of information about their  
9 product and the mining of their product,  
10 right?

11 MR. HYNES: Vague,  
12 overbroad.

13 THE WITNESS: I have seen in  
14 documents from Johnson & Johnson  
15 that are -- that I wouldn't agree  
16 with that with, meaning from my  
17 area of expertise. I don't hold  
18 individuals at Johnson & Johnson  
19 out as experts in asbestos  
20 analysis. They were in many  
21 instances following -- they were  
22 looking for outside help with all  
23 of those issues, especially in the  
24 early '70s. So I think it really

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1           just depends upon a document and  
2           whether or not there's enough  
3           information for me there to really  
4           evaluate what they're talking  
5           about, how they're using the  
6           terms, as we discussed earlier  
7           today, and there's some ambiguity  
8           there. I wouldn't -- I don't  
9           accept anything they say at face  
10          value.

11       BY MR. OLIVER:

12           Q.       So at least in 1973 with  
13          regard to what was happening then, the  
14          most reliable source of information we  
15          have about that time period within  
16          Johnson & Johnson is the company's  
17          documents, right?

18                    I mean, we don't have  
19          another source of information about that,  
20          do we?

21           A.       Well, we have product from  
22          those time periods that I have tested  
23          using -- that I have personally tested  
24          that I can speak to, and that's

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1 ultimately what I base my opinion on, is  
2 what's actually in products that would  
3 have been derived in these time frames  
4 that we have -- that we can test today  
5 and know and have data for what's in  
6 there.

7 Q. So let's just look at the  
8 document.

9 First of all, the author of  
10 the document is D. R. -- and I've never  
11 known if it's Petterson or Petterson.  
12 It's got two Ts, but you've seen this  
13 man's name before, correct?

14 A. I think so.

15 Q. Yeah. And you never talked  
16 to him, obviously, right?

17 A. I have not.

18 Q. Okay. And the man that it's  
19 to is D. D. Johnston, and you've seen his  
20 name before in Johnson & Johnson  
21 documents, correct?

22 A. It's possible.

23 Q. And you never talked to Mr.  
24 Johnston?

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1 A. I have not.

2 Q. The subject of this is  
3 Windsor Minerals and Talc, true?

4 A. Yes.

5 Q. At the time Windsor Minerals  
6 was the company operating the Vermont  
7 mines that Johnson & Johnson began using  
8 for its baby powder, right?

9 A. Correct.

10 Q. So in the first paragraph --  
11 and you know what, I didn't mark this.

12 MR. OLIVER: Madam Court  
13 Reporter, I'm sorry, we're going  
14 to mark this as Plaintiffs'  
15 Exhibit 11. I apologize for that.

16 BY MR. OLIVER:

17 Q. Sorry about that, Dr.  
18 Sanchez.

19 Let me direct you to the  
20 first paragraph. D. R. Petterson or --  
21 yeah. D. R. Petterson writes, "it is our  
22 joint conclusion that we should not rely  
23 on the Clean Mine approach as a  
24 protective device for baby powder in the



1 current asbestos or asbestos-form  
2 controversy."

3 Did I read that correctly?

4 A. Yes.

5 Q. And you agree that at this  
6 time, in 1973, when D. R. Petterson wrote  
7 "asbestos and asbestos-form," that it was  
8 widely known in the medical community  
9 that asbestos or asbestiform particles  
10 were cancer causing, correct?

11 A. I think we're in this issue  
12 of using terms that aren't well-defined.  
13 I don't know if that correlates to what  
14 is being done at the same time frame in  
15 the medical literature.

16 It is known at this point  
17 that, yeah, there are health effects  
18 associated with exposure to asbestos, but  
19 to equate what they're saying here to  
20 those other studies I think would be --  
21 would be too far to go with the  
22 information available here.

23 Q. Okay. So you don't know  
24 what D. R. Petterson was thinking, right?

1           A.       No, I do not. I also don't  
2 know how he's using these terms exactly,  
3 do these terms comport with current  
4 understanding or not the way he's using  
5 them.

6           Q.       But the best evidence we  
7 have of what D. R. Petterson was trying  
8 to communicate is what he actually wrote  
9 down in 1973. That's the best evidence  
10 we have of what he was trying to  
11 communicate, correct?

12          A.       I -- I don't know that. The  
13 letter -- there's -- there's --  
14 obviously, he wrote this memo or this  
15 letter and it says what it says, but  
16 then, you know, what does that mean in  
17 broader application, I don't know.

18          Q.       Okay. So when he wrote  
19 asbestos, your opinion is he meant  
20 asbestos or not asbestos?

21          A.       I think if you look at that  
22 time, OSHA promulgated their first  
23 regulations in 1972, but those -- the  
24 language that was used originally changed

1 over time. So again, I think you'd have  
2 to look at -- he references here going to  
3 some other meetings about time -- time  
4 limited values for minerals, things of  
5 that nature. There must have been  
6 regulatory meetings, rule making. There  
7 must -- there were other things going on  
8 here that could help inform what these  
9 terms mean, but just simply looking at  
10 this document in and of itself doesn't  
11 help inform the current -- the situation  
12 they were dealing with at the time it was  
13 written and we would need that in order  
14 to really get -- I think understand what  
15 was -- what was being used and what was  
16 being said here.

17 Q. So because of this lack of  
18 information that you have just pointed  
19 out, when D. R. Petterson writes  
20 "asbestos or asbestos-form," you are not  
21 able to say what he meant; is that fair?

22 A. No. All I would say is he  
23 means by that term is how that term was  
24 being used at the time. I would not

1       equate those terms to mean exactly what  
2       we mean for it today as we have  
3       progressed in our understanding in  
4       scientific knowledge. So I would not  
5       want to rely upon those terms to create  
6       an equivalency of how we understand those  
7       terms today. They need to be put in  
8       context of the time of what those terms  
9       could mean at that time in order to  
10      evaluate that.

11               Q.       When he says asbestos or  
12      asbestiform, what do you think he meant?

13               A.       My -- it would be me -- his  
14      understanding of those terms in 1973. So  
15      I would go back to the regulatory  
16      definitions, what was the rule making  
17      that was being proposed and those things  
18      that would have initiated Bill Ashton in  
19      his visits to Roger Miller and Vernon  
20      Zeitz concerning the Vermont talc mines.  
21      I would need that type -- I would want to  
22      see that type of information and  
23      understand that information before I  
24      start equating these terms as I

1 understand these terms.

2 Q. So -- I'm sorry.

3 A. I was done.

4 Q. So the answer is you -- at  
5 this point you have not formulated any  
6 opinion about what he meant by "asbestos  
7 or asbestos-form" in -- in this memo,  
8 right, because you haven't done those  
9 things you just told me about?

10 A. Not specifically as it  
11 relates to this document, but what I --  
12 all I'm saying is I would not create -- I  
13 think it would be improper scientifically  
14 to take these -- these words and apply  
15 the same meaning as we use them today.

16 Q. Well, let me just do it this  
17 way. Did I interrupt you?

18 A. You did, but I was just  
19 repeating myself from earlier to try to  
20 convey the point.

21 Q. Okay. And one of the  
22 reasons that I keep interrupting you, Dr.  
23 Sanchez, is because there's a delay here.  
24 I know you think I'm -- I'm not trying to

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1       be rude. It's not coming in, right?

2                   If you pause, which you  
3 frequently do, there's nothing wrong with  
4 that, I -- it takes too long and so I  
5 interrupt you. I'm not doing it on  
6 purpose is all I'm trying to say.

7                   So I think when he says  
8 "asbestos or asbestos-form controversy,"  
9 he's talking about dangerous  
10 cancer-causing particles in 1973. I  
11 think that's what he meant.

12                   Do you agree or disagree  
13 with what I'm saying?

14                   MR. HYNES: Calls for  
15 speculation, asked and answered.

16                   THE WITNESS: I would think  
17 that there are things going on in  
18 the regulatory and the scientific  
19 community at this time that is  
20 causing them to look into this  
21 issue. That -- obviously,  
22 something with a deleterious  
23 health effect like asbestos would  
24 be -- would be one of those

1 issues, could be very germane to  
2 this, but that does not mean that  
3 the definitions being used and the  
4 way he's using these terms  
5 actually relate to those -- you  
6 know, those materials you don't  
7 want in talc.

8 So I think -- I mean as  
9 you -- I mean one of the important  
10 things about this document to me  
11 is Johnson & Johnson stopped --  
12 assuming they believed -- they say  
13 right here we believe this mine to  
14 be very clean, but they want to  
15 make sure that what they're  
16 selling is clean, and this is when  
17 they start implementing a testing  
18 regime on those final products,  
19 which we have records of.

20 BY MR. OLIVER:

21 Q. So my question was: Do you  
22 agree or disagree with me when he says  
23 "asbestos or asbestos-form," I think he  
24 means cancer causing fibers?

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1 Do you agree with that or  
2 disagree with it?

3 MR. HYNES: Same objection;  
4 asked and answered.

5 THE WITNESS: Yeah, I'd just  
6 refer to my previous answer. I  
7 believe that, yes, they are  
8 looking into that issue worried  
9 about potentially, you know,  
10 deleterious materials in the talc  
11 coming from the mine. However, to  
12 say that what they understood  
13 those materials might be at that  
14 time may not -- might not actually  
15 be the material that you're  
16 concerned with.

17 So again, this just goes  
18 into making sure we understand  
19 what they're meaning, not to draw  
20 false equivalency to the same  
21 terms being used.

22 BY MR. OLIVER:

23 Q. So let's look at the next  
24 sentence. You already pointed out that



1 Johnson & Johnson says we believe we want  
2 to be very clean. And after the  
3 semicolon it says, however, we're also  
4 confident that fiber forming or fiber  
5 type minerals could be found.

6 Did I read that correctly?

7 A. You did.

8 Q. Okay. The next sentence  
9 says, the usefulness of the, quote, Clean  
10 Mine, end quote, approach for asbestos  
11 only is over.

12 Did I read that correctly?

13 A. You did.

14 Q. Okay. When he says fiber  
15 forming or fiber type minerals, he's  
16 referring to asbestos, right?

17 A. Not necessarily. As I  
18 pointed out in my report and other  
19 places, non-asbestos amphiboles by  
20 definition are not asbestos, but they  
21 could create particles that could be  
22 called fibers if using simple ratio  
23 counting criteria. Further to that  
24 point, at this time I believe the FDA had

1 already put out as a proposed optical  
2 test for asbestos in talc which relied  
3 solely on a simple aspect ratio and a  
4 very poorly defined optical properties  
5 for what you called asbestos.

6 So again, there's context of  
7 things that are happening and being  
8 discussed and worked through at this time  
9 that are very relevant to understanding  
10 what these terms may be, what they're  
11 concerned with and what they're working  
12 with.

13 Q. Well, Dr. Sanchez --

14 A. For instance, in the same  
15 document in paragraph three they --  
16 there's -- there's statements here that  
17 are incorrect today, and then there's  
18 the -- this whole concept of aspect  
19 ratio, whether you use three to one, five  
20 to one, ten to one, what will be adopted,  
21 how are they going to define these  
22 things. In modern usage we do not define  
23 asbestos by aspect ratio alone because  
24 that leads to false positives and are

1 not -- and so there's -- there's -- this  
2 is part of that chaos of the scientific  
3 method, scientific approach and people  
4 trying to understand the issue and  
5 they're trying to grapple with this  
6 concurrent in the midst of all the chaos.

7 Q. So let me just back up.

8 Asbestos, the dangerous  
9 kind, forms in fibers, right? You agree  
10 with that?

11 A. It forms naturally at -- a  
12 naturally fibrous material by definition.

13 Q. And he says fiber forming or  
14 fiber type minerals right here in the  
15 same paragraph where he says asbestos,  
16 right?

17 A. Okay.

18 Q. You agree with that, don't  
19 you?

20 A. In which way?

21 I agree that he -- yes. I  
22 don't know the broader implication.  
23 What's the broader implication you're  
24 asking me about?

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1           Q.       I'm not asking you about a  
2       broader implication. I'm just asking you  
3       what he says in the paragraph.

4                   He says, asbestos and fiber  
5       forming in the very same paragraph,  
6       right?

7           A.       Different sentences, but  
8       yes.

9           Q.       Sure. And the only logical  
10      conclusion, Dr. Sanchez, is that he's  
11      talking about dangerous asbestos that  
12      causes cancer. That's really the only  
13      logical conclusion, right?

14                   MR. HYNES: Objection;  
15      argumentative, calls for  
16      speculation.

17                   THE WITNESS: It is not. As  
18      it states in the lower part,  
19      they're actually working out,  
20      testing methodologies at this  
21      time. They're evaluating what  
22      implications these things have,  
23      but you also need to add in the  
24      fact what -- the approach they

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1           were taking at this time, meaning  
2           what medical research, what did  
3           they know at that time versus what  
4           we know now.

5                       We have much more knowledge  
6           today than we did back then. So  
7           again, I think it is  
8           scientifically inaccurate to take  
9           these words and add them and make  
10          them equivalent to how one may use  
11          these words today because the  
12          situation they were in and the  
13          knowledge they had at that time is  
14          different than the knowledge we  
15          have today.

16       BY MR. OLIVER:

17               Q.       So the last sentence says  
18          that -- basically, that Johnson & Johnson  
19          doesn't believe it can rely on a clean  
20          mine approach for asbestos only anymore,  
21          right, in 1973?

22               A.       I don't -- I don't see that  
23          there. Did you paraphrase something?

24               Q.       I didn't paraphrase it. The

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1       usefulness of the clean mine approach for  
2       asbestos only is over, right?

3               A.       Yes, that's the statement  
4       they make.

5               Q.       Right. And what that means  
6       is, he is saying that we, Johnson &  
7       Johnson, can no longer rely on the clean  
8       mine approach. That's how he states it  
9       right up at the front of the paragraph,  
10      right?

11              A.       Yes, and I think if you look  
12      at the testing and the records of Johnson  
13      & Johnson, they started implementing  
14      testing regime about this time to monitor  
15      the material for asbestos as they  
16      understood it at the time. They started  
17      to place those checks on their processes,  
18      on their final product about this time.

19              Q.       But, Dr. Sanchez, I don't  
20      understand because you testified to  
21      juries over and over again that the mines  
22      they used were clean?

23              A.       Only because you took my  
24      words out of context and tried to apply

1       it to a sentence in a document that's 40  
2       years old and tried to make it  
3       equivalent.

4                   The mines at issue for  
5       Johnson & Johnson are clean. They do  
6       not -- they were not -- the material they  
7       were mining and putting into the product,  
8       based upon the evidence I have of testing  
9       those products, do not contain asbestos.

10                   The idea that's simply put  
11       forward and alleged by plaintiffs in  
12       almost all the litigation is that  
13       asbestos always occurs with talc. You  
14       can't mine talc without mining asbestos.  
15       Those are all false propositions. Those  
16       are all false allegations.

17                   Q.       Dr. Sanchez, the last  
18       sentence in the second paragraph says,  
19       this method with appropriate concentrated  
20       techniques will permit a good laboratory  
21       to identify asbestos or tremolite in a  
22       talc sample.

23                               Did I read that correctly?

24                   A.       I don't think you turned the

1 page. You're on the same document.

2 Where are you at now?

3 Q. I'm at the end of the second  
4 paragraph. It's got a two in front of  
5 it. It begins with this method.

6 A. Okay.

7 Q. You agree that that last  
8 sentence is an accurate sentence, isn't  
9 it?

10 A. No, because it's not  
11 clear -- so again, they're referencing  
12 some type of a technique of  
13 identification for asbestos or asbestos  
14 form materials will be an optical  
15 approach. They talk about being a  
16 variation of the McCrone method. I  
17 would -- like they're discussing some  
18 type of a methodology here. I don't have  
19 the methodology to look at to be able to  
20 assess whether or not the other  
21 statements in this paragraph are accurate  
22 or not. This could have been --

23 Q. So --

24 A. This could be the belief of



1 Mr. Petterson at the time, but that  
2 doesn't mean the belief of Mr. Petterson  
3 is accurate or correct.

4 Q. All right. So he uses the  
5 word asbestos once again, right?

6 A. Sure.

7 Q. And when he uses that word,  
8 do you agree with me that he means the  
9 harmful cancer causing fiber-like  
10 material? Do you agree with that?

11 MR. HYNES: Asked and  
12 answered.

13 THE WITNESS: No, for the  
14 same reasons I stated. What if  
15 this method he's referring to  
16 defines asbestos as a particle  
17 with a refractive index greater  
18 than 1.55 and elongated shape?

19 That's not an adequate  
20 definition of asbestos to what we  
21 know to be harmful. So without  
22 seeing the optical method that's  
23 being discussed, without being  
24 able to evaluate its

1                   effectiveness, its ability to do  
2                   what it says it does, I don't take  
3                   any of those statements other than  
4                   it was this guy's belief that's  
5                   undefined, not part of the  
6                   document he said he believes would  
7                   do this. That doesn't mean that  
8                   he's right. I would need to see  
9                   the documents in order to assess  
10                  that.

11       BY MR. OLIVER:

12                  Q.       And that's my point. You  
13       haven't -- you said you needed more  
14       documents to assess what he meant when he  
15       said asbestos, right?

16                  A.       That's what I've been  
17       saying, yes. That is why, as I stated  
18       earlier, the actual testing of the  
19       products that would have come out of the  
20       mines at this time, which I have tested  
21       using modern testing protocols, using  
22       definitions that are defined and accepted  
23       in the regulatory agencies is what  
24       I've -- what I've tested those materials

1 under and I can speak to with surety.  
2 Looking at 60-year-old documents of men  
3 that are long dead or whenever they  
4 passed away and then taking their words  
5 and making it equivalent to our  
6 understanding today would be -- is not --  
7 is not a sound scientific approach.

8 Q. You cannot say with surety  
9 what he meant when he wrote that  
10 sentence, fair?

11 A. Since the term is not  
12 defined here, I would have to have other  
13 information of how he was defining  
14 asbestos at that time.

15 Q. Okay. The next paragraph,  
16 paragraph number three, the first  
17 sentence says, the current medical  
18 research is confirming that it's particle  
19 shape, not chemical substance which is  
20 harmful as such fiber-like materials will  
21 be suspect.

22 Did I read that correctly?

23 A. You did.

24 Q. Okay. You agree that in

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1       2019 the International Working Group on  
2       asbestos in consumer products reached a  
3       similar conclusion, that particle shape  
4       and not the chemical substance is the  
5       most important aspect of whether a  
6       fiber-like material is harmful medically?

7                   MR. HYNES:   Objection;  
8       misstates the document, outside  
9       the scope of this expert's  
10      expertise.

11                  THE WITNESS:   Two issues  
12      with that.   I think you misstated  
13      the organization or the group, but  
14      even the statement here is  
15      inaccurate.   The -- there has been  
16      many studies that have dealt with  
17      what is known to be carcinogen and  
18      not.   It is not based solely on  
19      particle shape.   That has been  
20      disproved -- that has been shown  
21      not to be accurate at least until  
22      Stanton a few years after this.

23                  It's more than simple  
24      particle shape.   The composition

1                   and the crystal structure and  
2                   other factors do matter.

3       BY MR. OLIVER:

4                   Q.       And you base that on all of  
5       your medical understanding and training?

6                   MR. HYNES:   Argumentative.

7                   THE WITNESS:   You asked me a  
8       question regarding a statement  
9       that I know to be inaccurate based  
10      upon other testing that is out  
11      there in the medical field that  
12      came after these dates.   You also  
13      misstated the IW -- I forget.   The  
14      Interagency Working Group on -- on  
15      these issues.   That is not what  
16      they stated, nor does the report  
17      say that.

18      BY MR. OLIVER:

19                  Q.       So look with me at the next  
20      page, Dr. Sanchez, at paragraph 4B as for  
21      baby powder.

22                   The first sentence says, as  
23      for baby powder, the entire thrust of our  
24      communications with the FDA has

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1 concentrated on asbestos as harmful  
2 fiber-like material.

3 Did I read that correctly?

4 Excuse me.

5 A. You did.

6 Q. And in this sentence, D. R.  
7 Petterson defines asbestos as harmful  
8 fiber-like material, right?

9 A. Well, it's part of the  
10 sentence. It says, concentrated on  
11 asbestos as harmful fiber-like material,  
12 yeah.

13 Q. And so when he says asbestos  
14 as harmful fiber-like material, you agree  
15 with me that he means the cancer causing  
16 asbestos that we all worry about, right?

17 MR. HYNES: Again, asked and  
18 answered.

19 THE WITNESS: No. I mean,  
20 he has not defined what he means  
21 by the term asbestos. He's using  
22 the term, yes, in context of -- of  
23 concern of a negative health  
24 outcome, yes, but we still don't

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1 know what he means by the term  
2 asbestos and does it comport with  
3 our understanding today of what  
4 asbestos is and what particles  
5 would fall under that rubric, and  
6 that's my only issue here. He's  
7 still not defining what he means  
8 by the term asbestos.

9 BY MR. OLIVER:

10 Q. The last two -- actually,  
11 the last sentence begins with our. Our  
12 baby powder contains talc fragments  
13 classifiable as fiber. Occasionally  
14 sub-trace quantities of tremolite or  
15 actinolite are identifiable (optical  
16 microscope) and these might be classified  
17 as asbestos fiber.

18 Did I read that sentence  
19 correctly?

20 A. You did.

21 Q. When he says asbestos fiber,  
22 do you agree he means the dangerous  
23 cancer causing asbestos fibers that we  
24 all know about?

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1 MR. HYNES: Again, asked and  
2 answered.

3 THE WITNESS: No. It's the  
4 same issue. You need to look at  
5 what is that optical microscopy  
6 approach referring to. Is that  
7 defining asbestos, and in its --  
8 and how it defines asbestos is --  
9 does it actually -- does it  
10 actually comport or consistent  
11 with what we understand today with  
12 many more years of understanding  
13 and research being conducted on  
14 these issues. That needs to be  
15 addressed in order to get it to --  
16 to put this document into proper  
17 context such as you're phrasing  
18 those questions.

19 BY MR. OLIVER:

20 Q. And you -- and just so I  
21 understand it, you haven't done that work  
22 for your expert report in this case?

23 A. With particular to a Mr.  
24 Petterson's letter in 1973, no, I have



1 not gone through and done that detailed  
2 work. I am generally familiar with the  
3 proposed optical microscopy method by the  
4 FDA in 1972, which might be what they're  
5 referring to here, and that method is  
6 wholly inadequate, even back then, to  
7 identify asbestos reliably, let alone tie  
8 it to any adverse health effects, as  
9 you're suggesting. So I think -- I also  
10 would point to the change or the update  
11 of the regulations in OSHA, the  
12 definitions of asbestos by EPA over the  
13 years, by MSHA. As more knowledge has  
14 become available, these ambiguities that  
15 existed at the time have been somewhat  
16 resolved with more information.

17 Q. So, Dr. Sanchez, let me just  
18 summarize what you know about this  
19 document.

20 You agree it's a 1973  
21 Johnson & Johnson memo, correct?

22 A. I do.

23 Q. And you agree that the  
24 author, both the person that it's -- who

1       wrote it and the person that it's sent  
2       to, these are business executives within  
3       the Johnson & Johnson corporate  
4       organization, right?

5               A.       I don't know what their  
6       titles are, but I believe, based upon  
7       them writing memos internally with  
8       Johnson & Johnson letterhead, I believe  
9       they are employees of Johnson & Johnson,  
10      but I don't know -- I can't say they're  
11      executives or whatever phrase you used to  
12      describe them.

13             Q.       You don't have any reason to  
14      believe that either of these men is a  
15      geologist or mineralogist, right?

16             A.       My understanding is Bill  
17      Ashton is.

18             Q.       Right. But Mr. Johnston and  
19      Mr. Petterson, you don't have any reason  
20      to believe that they're mineralogists or  
21      geologists?

22             A.       I don't know.

23             Q.       So one way or the other, you  
24      don't have any evidence of that, true?

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1           A.       Not as I sit here currently.

2           Q.       And this memo from 1973 uses  
3       the term "asbestos and asbestos-form"  
4       multiple times throughout the memo,  
5       correct?

6           A.       It does.

7           Q.       And you have not done work  
8       or are not able to say what precisely  
9       those terms mean in the context of this  
10      memo, right?

11          A.       No, those terms are not  
12      defined in a meaningful way within the  
13      context of the memo. You'd have to look  
14      at the time frame writing this in to get  
15      potential uses of those terms, how those  
16      terms may have been used, regulatory  
17      context at that time, and then evaluate  
18      whether that language is consistent as we  
19      understand it today with our current  
20      level of scientific knowledge.

21          Q.       And you have not done the  
22      work to form such an expert opinion with  
23      regard to this memo?

24          A.       I have done it in a general

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1 manner to what was happening in the  
2 1970s, but as it relates to me looking at  
3 this specific memo and going in and  
4 looking for Mr. Petterson's name, I have  
5 not, but as a general matter, I  
6 understand -- like, for example, that FDA  
7 method was a technical technique. That  
8 was never promulgated. It was proposed.  
9 It was tested. It failed. It is totally  
10 inadequate for the task at hand and it  
11 was understood to be so at the time and  
12 so it was abandoned.

13 So any -- any references to  
14 Mr. Petterson relying upon that optical  
15 technique, which I think it's a safe  
16 assumption it would have been, that would  
17 be wholly inadequate to address the issue  
18 of whether asbestos is known to be in the  
19 talcs and whether his definitions of  
20 asbestos are adequate to what asbestos  
21 truly is.

22 Q. There was a lot there, Dr.  
23 Sanchez. My question was much more  
24 simple.

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1                   You haven't formed an expert  
2           opinion that you plan on expressing about  
3           what D. R. Petterson meant in his memo  
4           when he said asbestos? You have not  
5           formed that opinion as an expert?

6                   MR. HYNES: Misstates  
7           testimony, asked and answered.

8                   THE WITNESS: I can speak  
9           generally of the time frames that  
10          this memo was written of the  
11          protocols that were being proposed  
12          by the FDA, which were optical  
13          technique. I can speak to that,  
14          and it's -- and it is inadequate  
15          for the task -- the task that it  
16          needed to do at the time.

17       BY MR. OLIVER:

18               Q.       Yeah. And, Dr. Sanchez, I'm  
19       sorry. I'm going to interrupt you. This  
20       time I mean to.

21                   I'm not asking you about  
22       those things that you're offering  
23       unrequested testimony about. I'm simply  
24       asking if you have formed an opinion in

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1       your expert work for Johnson & Johnson  
2       about what Dr. -- excuse me, D. R.  
3       Petterson meant when he said asbestos in  
4       this memo. Have you formed that expert  
5       opinion, yes or no?

6                   MR. HYNES: It's  
7       argumentative, asked and answered.

8                   THE WITNESS: I just  
9       answered the question. The  
10      proposed analytical methods that  
11      are concurrent with this letter  
12      and being most likely referenced  
13      by Mr. Petterson I have expert  
14      opinions on, and I have stated  
15      that now in two different answers.

16                   The terminologies that are  
17      being discussed at this time in  
18      the regulatory community are  
19      inadequate. They do not define  
20      those terms in a reasonable way in  
21      any way consistent with how we use  
22      the term today. So I would not  
23      draw -- I would not -- I would not  
24      use this document. It would be

1           improper to use this document to  
2           suggest otherwise.

3       BY MR. OLIVER:

4           Q.       I'm going to pause and take  
5       a break. Dr. Sanchez, give me a minute.

6                   MR. OLIVER: Kevin, I will  
7       send you my cellphone. Can you  
8       please give me a call or would you  
9       like me to tell you what it is  
10      now?

11                  MR. HYNES: Let's go off the  
12      record.

13                  (A short recess was held at  
14      2:53 p.m. until 3:04 p.m.)

15      BY MR. OLIVER:

16           Q.       Okay. So, Dr. Sanchez, I  
17      got just -- just finishing up questions  
18      about this 1963 (sic) document.

19                  Do you have or have you  
20      formed a specific opinion about what D.  
21      R. Petterson meant when he wrote asbestos  
22      in this memo?

23           A.       As I believe I've already  
24      testified to, I have not gone and scoured

1 J&J corporate documents for other  
2 writings of Petterson. However, I'm  
3 generally aware of how the methodology's  
4 being developed at that time.

5 Q. And is that a yes or no to  
6 my question?

7 I take it as a no, you have  
8 not formed such a specific opinion?

9 A. About Mr. Petterson's  
10 knowledge, correct, general knowledge of  
11 the time that he would have been working  
12 and writing under.

13 Q. Okay.

14 MR. OLIVER: If you'll go  
15 to -- are we on Exhibit 12 now?

16 We'll mark as Plaintiffs'  
17 Exhibit 12 an October 11, 1972,  
18 memo to the Department of Health  
19 and Human Services from Johnson &  
20 Johnson.

21 THE WITNESS: Say that  
22 again. Which year?

23 BY MR. OLIVER:

24 Q. It's 1972, Department of



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1 Health and Human Services. Well, it's  
2 Health, Education and Welfare is what  
3 they call it back then. It's up on the  
4 screen if you're -- I just want you to  
5 have a copy if you want a copy.

6 A. I have it in front of me.

7 Q. Okay. You did not include  
8 this document on your reliance list to my  
9 recollection.

10 Does that sound about right?

11 A. I don't know if I've seen  
12 this document before.

13 Q. Okay. Well, first of all,  
14 this is an October 11, 1972 letter,  
15 correct?

16 A. I'm sorry. What was the  
17 date you said again?

18 Q. October 11th, 1972.

19 A. Yes.

20 Q. And at the end of the  
21 letter, the last page you'll notice it's  
22 signed Johnson & Johnson?

23 A. Okay.

24 Q. So it is a Johnson & Johnson

1 document based on your review of the  
2 document?

3 A. It appears to be.

4 Q. And you don't remember  
5 whether you've ever read this or not?

6 A. I don't have a recollection  
7 of this document.

8 Q. Okay. Take a moment to  
9 familiarize yourself with this document.  
10 Have you had a chance to  
11 look at it?

12 A. I'm reading through it right  
13 now.

14 Q. Are you ready to go?

15 A. I will let you know when I'm  
16 finished reading and familiarizing myself  
17 with the document.

18 Okay.

19 Q. Okay. So this is, you  
20 agree, a document where Johnson & Johnson  
21 wrote to the Department of Health,  
22 Education and Welfare about talc and  
23 asbestos-form particles, right?

24 A. Okay.

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1           Q.     Do you agree that that is  
2     what the memo appears to be?

3           A.     Well, that's the topic of --  
4     of -- that is -- those are topics within  
5     the document, yeah.

6           Q.     Okay. And in this document  
7     on the first page, Johnson & Johnson  
8     identifies for the Department of Health,  
9     Education and Welfare some of the  
10    assumptions about talc that it believes  
11    to be incorrect, right?

12          A.     Okay.

13          Q.     That is -- that's one of the  
14    things they do in the memo, right?

15          A.     Well, there seems to be a  
16    document that was being put forward by  
17    the Department of Health, Education and  
18    Welfare regarding the use of some kind of  
19    a food standard. So they're addressing  
20    assertions or portions that were  
21    published in the -- as a proposed  
22    regulation in food ingredients.

23          Q.     Right. They're responding  
24    to a proposed regulation?

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1           A.       Right.  They're -- this is  
2       part of a rule making process.

3           Q.       Okay.  And in the middle of  
4       the first page they say, the assumptions  
5       we believe to be incorrect are as  
6       follows:  Talc can be processed to remove  
7       asbestos-form particles.

8                     Did I read that correctly?

9           A.       You did.

10          Q.       So you agree that in 1972,  
11       Johnson & Johnson represented to the  
12       federal government agency, in this case  
13       the Department of Health, Education and  
14       Welfare, that talc cannot be processed to  
15       remove asbestos-form particles at that  
16       time anyway, right?  That was its  
17       position to the government?

18          A.       One would need to look at  
19       the government proposal to see how the  
20       term asbestos-form particles is being  
21       defined, but yes, they make that  
22       statement, but it's in context of another  
23       document that they're responding to to  
24       point out what they believe, as they say,

1       inaccuracies.

2               Q.       So first of all, you didn't  
3       originally have this on your reliance  
4       list, correct?

5               A.       I don't believe so.

6               Q.       Okay.   So Johnson & Johnson  
7       never gave this document to you based on  
8       your memory?

9               A.       This is not the type of a  
10       document that I have been asked to opine  
11       on.   There's nothing in here regarding  
12       testing of -- testing a talc in any  
13       meaningful way that would be in my area  
14       of expertise.   This is -- most of this  
15       document is referring to health studies,  
16       which is, again, not part of my expertise  
17       on these issues.

18              Q.       Okay.   So you just haven't  
19       formed any opinion about what's in this  
20       document at all since you first saw it  
21       today, right?

22              A.       The questions I would need  
23       answered is what is this other document,  
24       this proposed food additives proposal

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1       regarding regulation of prior-sanctioned  
2       food ingredients from August 12th, 1972.  
3       What is that document, what does that  
4       document state about these terms and  
5       these -- and these issues in order to be  
6       able to assess what's being discussed  
7       here in a meaningful way for my area of  
8       expertise.

9                       It appears from the writing  
10       that the term -- the way that that  
11       document is using asbestos-form particles  
12       is too vague. That's one of the  
13       criticisms of Johnson & Johnson. It  
14       incorporates way too many -- it's too  
15       broad of how they define that term.  
16       That's one -- but again, I'd have to look  
17       at that if I was asked to form specific  
18       opinions about anything related to the  
19       use of the term asbestos-form or  
20       fiber-form or other language used in here  
21       that may have geologic or mineralogical  
22       significance as to whether they're  
23       actually discussing asbestos.

24               Q.       And at this point sitting

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1       here today, you have simply formed no  
2       such specific opinion, right?

3               A.       I'm not familiar offhand. I  
4       may be, but without looking at it, I  
5       can't be sure, but my belief as I sit  
6       here today is I have not -- I may not  
7       have seen this food additives proposed  
8       regulation that was published. It might  
9       be the same one with the optical testing  
10      that I referred to earlier, but I'd have  
11      to check just to make sure.

12              Q.       So hearing no specific  
13      opinion, I'll move to the next document.

14                      The next document is a 1974  
15      letter, and it's got a Bates label. It's  
16      JNJ000270495.

17                      Now, you have seen this  
18      document before, correct?

19              A.       What was the last three  
20      digits of the Bates number?

21              Q.       495. I'll represent to you  
22      that it's on your reliance list.

23              A.       I've seen this, yes.

24                      MR. OLIVER: Okay. We'll

1 mark it as Exhibit 13.

2 BY MR. OLIVER:

3 Q. Okay. This is a 1974  
4 document and the subject is Italian talc  
5 source, Society Talco e Grafite Val  
6 Chisone, right?

7 A. Correct.

8 Q. Okay. And remember when I  
9 referred to SVC? You and I had some  
10 discussion about SVC?

11 A. Yes. I was trying to  
12 clarify what you meant by that, yes.

13 Q. Yes. So in this memo, it  
14 seems that they're -- when I was saying  
15 SVC, I meant the same thing you did,  
16 right?

17 A. Well, in dealing with prior  
18 ownership of the Italian mines, I had  
19 stated there was a talc and graphite  
20 company of Val Chisone and that appears  
21 to be the subject line here is that  
22 company that I was referring to.

23 Q. Right. And in this memo,  
24 they use -- they use SVC to refer to that



1 company, correct?

2 A. It appears to be.

3 Q. Okay. Do you remember the  
4 facts behind how this memo came to be,  
5 like what they're talking about?

6 A. Only vaguely. I remember  
7 that the talc mining company put out some  
8 circular saying that their talc only  
9 contained a little bit of asbestos, so it  
10 was the best out there. A chrysotile  
11 type variety, if I recall.

12 Q. Right. So the first  
13 paragraph, second sentence says, our  
14 objective was to forestall the upsetting  
15 impact which distribution of a recent SVC  
16 publication will have on the world talc  
17 market.

18 Did I read that correctly?

19 A. Yes.

20 Q. And the recent SVC  
21 publication is the circular that you were  
22 just referencing, correct?

23 A. I -- I believe so.

24 Q. And the author of the memo

1 is William Ashton, right?

2 A. Yes.

3 Q. And he -- you believe he's a  
4 mineralogist or a geologist?

5 A. My recollection is he has a  
6 background in that area.

7 Q. Okay. Do you know if he was  
8 formally a mineralogist or geologist? I  
9 don't know.

10 A. I think by education, yes.

11 Q. Okay. Certainly at this  
12 point we agree he was a very high level  
13 executive within Johnson & Johnson?

14 A. I don't know what you mean  
15 by executive. I don't know his -- I  
16 don't know where in the totem pole of  
17 anybody at Johnson & Johnson they live,  
18 but he was heavily involved with the -- I  
19 mean I can't speak to other work he did.  
20 All I've seen is his name in the Johnson  
21 & Johnson Bates stamped documents, but  
22 they're -- they're replete for many years  
23 of him being involved with -- with  
24 explanations and work following up on

1 issues revolving around talc.

2 Q. Okay. And Mr. Ashton writes  
3 that this circular that SVC prepared is  
4 going to have an upsetting impact on the  
5 world talc market, right?

6 A. He states that.

7 Q. And in the second paragraph  
8 he says that it will raise doubts on the  
9 validity of the documentation of the  
10 purity and safety of talc, right?

11 A. He states that.

12 Q. And then below that in  
13 bullet points one, two, three he lists  
14 the reasons that that is so, right?

15 A. Okay.

16 Q. And number two he says it,  
17 meaning the circular states that SVC talc  
18 has only traces of chrysotile asbestos,  
19 right? That's what Mr. Ashton writes?

20 A. He does.

21 Q. And chrysotile asbestos --  
22 chrysotile is always asbestos, right?

23 A. By definition, yes.

24 Q. Okay. It's always the

1 dangerous kind of asbestos?

2 A. I don't -- you keep saying  
3 things like that. If it's truly  
4 asbestos, it's a recognized human  
5 carcinogen. So I don't know why you keep  
6 asserting that there's somehow a safe  
7 form of asbestos. I don't understand  
8 that.

9 Q. Okay. There is no safe form  
10 of asbestos?

11 A. If it is asbestos, it's  
12 regulated and a known human carcinogen.

13 Q. And number three is saying  
14 that the SVC circular points out it calls  
15 undue attention to a host of trace metals  
16 and talcs and brands them as harmful  
17 elements, SVC talc being the least  
18 harmful.

19 Did I read that correctly?

20 A. You did.

21 Q. Do you know what trace  
22 metals he's talking about being in SVC  
23 talcs?

24 A. I'd have to see the

1 circular.

2 What happens -- well, I'd  
3 only be guessing. I'd need to see the  
4 circular to see how they were making that  
5 determination of metal contents.

6 Q. And ultimately, Mr. Ashton  
7 convinces SVC to let them write an  
8 English version of this, right?

9 A. Based upon their  
10 deliberations, yes.

11 MR. OLIVER: Let's go to the  
12 next document we'll mark as  
13 Plaintiffs' Exhibit -- we're going  
14 to mark the next exhibit as  
15 Exhibit 14.

16 BY MR. OLIVER:

17 Q. Dr. Sanchez, it's a 1984  
18 asbestos Chinese mine document, J&J  
19 00062436. It's a single page.

20 A. Okay.

21 Q. Okay. This is a document  
22 that's on your reliance list, correct?

23 A. I'd have to check, but it  
24 could be.

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1           Q.     Okay. I'll represent to you  
2     that it is. You don't have any reason to  
3     doubt that, do you?

4           A.     No.

5           Q.     Okay. You've seen this  
6     document before, right?

7           A.     I can't remember if I have  
8     or not.

9           Q.     Okay. Well, it's  
10    certainly -- it's a testing, an  
11    analytical type document for asbestos,  
12    right?

13          A.     From 1985, yes. It appears  
14    to be -- it's summarizing testing done  
15    for various qualification requirements,  
16    one of which is labeled simply as  
17    microscopy. It doesn't -- doesn't  
18    mention the test method, but then it says  
19    asbestiforms positive.

20          Q.     Right. And it's authored by  
21    Mr. Ashton, correct?

22          A.     Yes, that's correct.

23          Q.     And you already established  
24    your belief that he had geological

1        qualifications, right?

2                    A.        Yes.

3                    Q.        Okay. And it identifies a  
4        sample of 100T, a lot of cosmetic-grade  
5        talc that they had received from China,  
6        right?

7                    A.        Well, the project name is  
8        simply Chinese talc, and then the sample  
9        identification, it includes what you  
10       stated as the 100T lots of cosmetic  
11       grade.

12                   Q.        Now, just to be clear, you  
13       know that Johnson & Johnson at this time  
14       was not supplying baby powder on the  
15       shelves from China; is that right?

16                   A.        That's correct.

17                   Q.        But in this Chinese talc,  
18       Mr. Ashton writes that they identified by  
19       microscopy asbestiform positive, right?

20                   A.        They do.

21                   Q.        Okay. And when Mr. Ashton  
22       writes that, you know he means dangerous  
23       asbestos, right, because he's a  
24       geologist?

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1           A.       I don't know why you keep  
2       saying dangerous asbestos. Again, they  
3       are saying they're seeing asbestiform  
4       positive in the document. That is  
5       something that would fail their criteria  
6       in order to be used in a product.

7           Q.       And you agree when he writes  
8       that in this 1985 document and he says  
9       asbestiform positive, he means asbestos,  
10      right, cancer causing asbestos?

11                  MR. HYNES: Objection to  
12      form.

13                  THE WITNESS: Again, you're  
14      getting into areas that are --  
15      that I can't answer. I don't have  
16      expertise in nor -- for example,  
17      it doesn't identify the test  
18      method being used. I don't know  
19      exactly how that term is being  
20      used, but he does say it's  
21      asbestiform positive.

22      BY MR. OLIVER:

23           Q.       Do you know -- hold on a  
24      second.



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1 MR. OLIVER: Katy, can we  
2 pull up -- the document in my  
3 folder, I don't know if it's this  
4 way in his folder.

5 BY MR. OLIVER:

6 Q. Dr. Sanchez, you should have  
7 a folder that says 1985 -- it should say  
8 lot of Chinese talc response.

9 You should have a folder  
10 that says this and it should be like a  
11 single document or a couple pages. I  
12 just have the wrong thing. It looks like  
13 you may have the right thing.

14 All right. Do you see the  
15 document on the screen, Dr. Sanchez?

16 A. No, I don't have that in my  
17 documents you sent me.

18 MR. OLIVER: Okay. Well,  
19 let's mark it as Plaintiffs' --  
20 are we on 14?

21 We'll mark it as Plaintiffs'  
22 Exhibit 15.

23 BY MR. OLIVER:

24 Q. And my question is pretty

1       simple.

2                       This is Mr. Ashton again,  
3       right?

4               A.       Hold on.   Let me read the  
5       document first.

6                       It's a single page you say?

7               Q.       Yeah, it's a single page.  
8       And take your time.   I meant to put it in  
9       there and somehow we got confused.

10              A.       Okay.

11              Q.       So is this a document that's  
12       on your reliance list?

13              A.       I'd have to check.   I don't  
14       know.   I don't -- I don't recall this  
15       document.

16              Q.       Okay.   So you just don't  
17       know one way or the other what this  
18       document has to do with?

19              A.       No, I don't know the  
20       background of this document.

21              Q.       Okay.   All right.   Let's go  
22       to what we'll mark as Plaintiffs' Exhibit  
23       16.   If should be labeled 1971 CS MRI  
24       project number 390517.

1           A.       Okay.

2           Q.       Okay. Is this a document  
3 that you have seen before?

4                    I believe it's on your  
5 reliance list, but I'm not sure about  
6 that. You'll have to thumb through it.  
7 There's a lot of documents in here.

8           A.       They've been stapled upside  
9 down and backwards. Let me try to fix  
10 this so I can actually go through it.

11                    So I don't see Bates stamps  
12 on these documents. All I see are what  
13 appear to be plaintiff markings, like a  
14 P-3181\_66.

15           Q.       So you don't -- you just  
16 don't know whether you've seen these or  
17 not?

18           A.       Sorry. I'm still looking  
19 through it. I'm just making comments  
20 upon -- I don't believe I received  
21 documents from Johnson & Johnson that  
22 didn't have Bates stamps with their name  
23 on it, with the J&J Bates stamp on it.  
24 So it would be hard for me to even verify

1       whether I received these documents.

2                       Sorry. I'm not sure how I  
3       can synthesize this because it's very  
4       disjointed materials. It's discussing  
5       all sorts of things. I don't know how to  
6       answer your question.

7                       Q.       Okay. Well, let me ask you  
8       this: Do you ever remember seeing this  
9       document?

10                      A.       It is not -- it is a  
11       glomeration of multiple documents.

12                      Q.       Right. Have you seen  
13       anything in here that you recognize?

14                      Let me ask you a background  
15       question. You know from your review of  
16       the documents, Dr. Sanchez, that at one  
17       point in time Johnson & Johnson retained  
18       the Colorado School of Mines to do some  
19       testing of its talc products, right?

20                      A.       I think they worked with  
21       some method development early in the '70s  
22       is what I recall and then also looking at  
23       processing work prior to that trying to  
24       look at different ways to process talc.

1                   Q.       Okay. And you know that the  
2 Colorado School of Mines looked at the  
3 Vermont talc sources for Johnson &  
4 Johnson, right?

5                   A.       I know they -- they were --  
6 they did work related to -- they did  
7 quite a bit of different work for Johnson  
8 & Johnson over time, but yes, I believe  
9 they did look at some talc from Vermont  
10 as well as other -- other sources.

11                  Q.       And you've reviewed some  
12 Colorado School of Mine's testing  
13 documents from Johnson & Johnson in  
14 your -- your work in this case, correct?

15                  A.       Possibly. Do you have --  
16 can you -- do you have a specific one you  
17 want to show me?

18                  Q.       Well, I just want to ask you  
19 some general questions.

20                            I mean, you agree that the  
21 Colorado School of Mines is a reliable  
22 organization into the '70s. You know,  
23 their analyst knew the difference between  
24 asbestos and non-asbestos, right?

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1           A.       Not necessarily. I would  
2       need -- again, I'm trying to -- trying to  
3       reiterate this. It doesn't matter who  
4       does the work. What did they do? Did  
5       the work -- was the work they were doing  
6       adequate for the task at hand, did they  
7       do it -- did they perform the work  
8       correctly?

9                    You could have very good  
10       scientists doing areas in research of --  
11       in areas they don't have expertise in and  
12       they can make -- they can make gross  
13       errors based upon, you know, just  
14       background and experiences. It doesn't  
15       mean they're a bad scientist, but it  
16       doesn't mean everything they do would be  
17       accurate or correct or I would just be  
18       able to agree with. I would need to see  
19       what they did, the data they generated,  
20       what they state from the data and whether  
21       or not what they state or the conclusions  
22       they reached are reasonable inferences  
23       from the data.

24           Q.       So let me just direct your

1 attention to -- I'm going to use the "P"  
2 number at the bottom of the page --  
3 3181\_44. So it's your 44th page. We're  
4 going to go there, but tell me when  
5 you've had a chance to get there.

6 Have you had a chance to  
7 turn there?

8 A. I'm almost there.

9 Q. Okay.

10 A. You said underscore 45?

11 Q. Yeah, it's 44 or 45 and 46.  
12 It's a single letter.

13 A. Okay.

14 Q. Okay. So this is a letter  
15 from Mr. Ashton in 1971, right?

16 A. It's to Mr. Ashton, yes.

17 Q. Sorry, to Mr. Ashton.

18 And if you look at the  
19 second page and the third page, you'll  
20 see that it is again referring to the  
21 Colorado School of Mines project number  
22 39517, right?

23 A. Okay.

24 Q. All right. On the first

1 page of this letter it says, Dear Mr.  
2 Ashton, following are the results of the  
3 point count analysis on sample 344L baby  
4 powder.

5 Did I read that correctly?

6 A. You did.

7 Q. Okay. And you agree with me  
8 that it appears that the Colorado School  
9 of Mines is testing some baby powder  
10 samples for Johnson & Johnson, right?

11 A. Well, it says a sample, yes.  
12 It's whatever the 344 baby powder sample  
13 is.

14 Q. Right. Okay. And the first  
15 thing that they list are free particles,  
16 correct?

17 That's the first chart you  
18 see, right?

19 A. Yes. It's a summation table  
20 of a point count that was conducted.

21 Q. Right. Okay. So on the  
22 left-hand side are the categories of  
23 things that they were looking for in  
24 their analysis, true?



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1           A.     I think it's the things that  
2 they observed, not necessarily looking  
3 for.

4           Q.     Okay. Fair enough.  
5                   The things that they  
6 observed, right?

7                   All right. So platy talc  
8 and/or chlorite with inclusions, that  
9 would not be asbestiform minerals,  
10 correct?

11          A.     It would not be.

12          Q.     Okay. Free diamond-shaped  
13 particles, is that asbestiform minerals?

14          A.     No.

15          Q.     Free carbonates, is that  
16 asbestiform minerals?

17          A.     No.

18          Q.     Free quartz, is that  
19 asbestiform minerals?

20          A.     No.

21          Q.     Okay. Free talc shards  
22 would not be asbestiform minerals either,  
23 would they?

24          A.     Talc would not ever be an

1       asbestiform mineral, so no.

2               Q.       Okay. Free non-talc  
3       needles, that could include asbestiform  
4       minerals, could include asbestiform  
5       minerals, true?

6               A.       Depending on how somebody  
7       decided to characterize.

8               Q.       Okay. And then the next  
9       category is free talc needles, right?

10              A.       Okay.

11              Q.       And that's not asbestiform.  
12       That's not asbestos because it's talc,  
13       right?

14              A.       Right.

15              Q.       But it would be a  
16       needle-like or fibrous form of talc,  
17       right?

18              A.       No. No, because you're  
19       confusing morphological habits with  
20       simply shape of a ground up particle.  
21       All it would be is it was talc particles  
22       that had the appearance of needles. That  
23       doesn't mean it was a fibrous talc or an  
24       asbestiform talc.

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1                   Q.       But it could be a fibrous  
2       talc?

3                   A.       Again, you're asking me  
4       to -- to guess. I can't guess from that.

5                   Q.       Okay. All right. So -- and  
6       dark opaque would not be -- would not be  
7       a reference to an asbestiform mineral,  
8       right?

9                   A.       No.

10                  Q.       Okay. So the free non-talc  
11       needles, the number of grains was three  
12       that they found, right?

13                  A.       Okay.

14                  Q.       I mean, you agree that  
15       that's the number written on the page?

16                  A.       That's the count, yes.

17                  Q.       Okay. So look with me at  
18       the next page. About halfway down the  
19       page it says -- well, actually, let me  
20       ask you a question about the table up  
21       top.

22                           The table up top says  
23       inclusions in talc and/or chlorite  
24       plates.

1 Do you see that?

2 A. Yes.

3 Q. Do you know why they would  
4 be measuring that differently, inclusions  
5 in talc or chlorite plates? Do you know  
6 why that's different from free grain  
7 particles?

8 A. Yeah, because when you  
9 actually look at micas and things like  
10 talc sheet silicates, sometimes you can  
11 get -- a lot of times it's root tail, but  
12 you get needles of root tail that occur  
13 within the plates, so they're not --

14 Q. All right. So the first  
15 results are just freestanding particles.  
16 The second results are particles that are  
17 somehow an inclusion within the plate,  
18 right?

19 A. Correct. As you look at  
20 these things through transmitted light,  
21 the minerals are transparent and then  
22 you'll see that there are potentially  
23 other -- other phases between the sheets,  
24 as it were, of the talc, of the plates.

1                   Q.       Okay. So down in this  
2       category, the bottom you again have that  
3       non-talc needles category and there's 36  
4       grains identified, correct?

5                   A.       Okay.

6                   Q.       I mean, that's what it says.  
7       You keep saying okay. That's just --  
8       it's just ambiguous.

9                                You agree that that's what  
10      it says, right?

11                  A.       Yes, that's what it says.

12                  Q.       Okay. So right below that  
13      down at the -- well, at the bottom it  
14      says, following are explanations of the  
15      terms used in the above data tables.

16                                So the Colorado School of  
17      Mines actually defines the terminology  
18      they're using, right?

19                  A.       Yes. They provide a  
20      description of the different categories  
21      that they list with counts.

22                  Q.       Okay. And if you turn to  
23      the third page, it said number six, the  
24      non-talc needles were identified as such.

1 If it was readily observable, the  
2 particles were true needles. And if they  
3 have extinction angles greater than 3  
4 degrees, usually 10 to 20 degrees.

5 Did I read that correctly?

6 A. Yes.

7 Q. Okay. And they distinguish  
8 those definitions from mere talc shards  
9 or talc needles, right?

10 A. Yes. They use the term talc  
11 shards and -- well, this is the other  
12 issue. They use an extinction angle to  
13 distinguish between what they call talc  
14 and non-talc needles. So that's how  
15 they're making the analytical distinction  
16 between those.

17 Q. Well, you agree with me that  
18 non-talc needles in this context could  
19 include asbestiform minerals?

20 A. You know, the way that  
21 they've defined talc needles here could  
22 also include that. The use of extinction  
23 angle doesn't provide identity.

24 Q. Okay. Next document or

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1       topic -- and you just don't remember --  
2       that was Exhibit 16, is that what we're  
3       on?

4                       MR. OLIVER:    Sorry.    Madam  
5                       Court Reporter, that exhibit we  
6                       just looked at was Exhibit 16.

7       BY MR. OLIVER:

8                       Q.       At this point you might want  
9       to refer to your Balderrama report, Dr.  
10      Sanchez.   I'm just, you know, letting you  
11      know.

12                      A.       Can I get a clarification?  
13                      Were you marking only the  
14      documents we spoke as of that exhibit or  
15      are you trying to mark this whole exhibit  
16      of a bunch of other documents?

17                      Q.       No, no, I'm marking the  
18      whole thing because we just referred to  
19      it.   I mean, it's clear on the record  
20      which pages we were referring to.  
21      Candidly, if we went through the whole  
22      thing there, it's just -- it's sort of  
23      a -- there's a pattern.   It's a series of  
24      tests I thought you had seen.

1 Dr. Sanchez, in your  
2 Balderrama report, and more generally,  
3 you agree that the mines that Johnson &  
4 Johnson used were the Hammondsville mine,  
5 the Argonaut mine and the Rainbow mines,  
6 correct?

7 A. Potentially used only from  
8 the Vermont years, yes.

9 Q. Okay. And you write in your  
10 report that they used potentially other  
11 mines, and I just want to know what  
12 you're talking about. What other mines  
13 in Vermont are you talking about when you  
14 say potentially other mines?

15 A. There are some -- I think  
16 there's some documents that may refer to  
17 other mines as a potential secondary ore  
18 source that wouldn't include those three,  
19 but I don't -- I don't have any knowledge  
20 whether it was actually ever used. Those  
21 kind of reasons.

22 Q. What were those mines, the  
23 potential secondary ore sources?

24 A. I don't recall without



1 looking at the documents. There were  
2 other mines in Southern Vermont, though.

3 Q. So you don't know -- was it  
4 Black Bear?

5 A. I just -- I don't recall  
6 without looking at the documents the  
7 specific names. It could have been, but  
8 I'd have -- I'd have to go reference.

9 Q. Okay. Well, the next time  
10 we take a break, is there a quick way for  
11 you to figure out what you meant in that  
12 report?

13 A. No, because I'd have to go  
14 through all of the mine source potential  
15 documents, which I don't have organized  
16 in a way that I could readily search  
17 those. I'd have to just start looking  
18 through all the documents.

19 Q. Okay. You draw a  
20 distinction in your report between  
21 Southern and Northern Vermont; is that  
22 true?

23 A. That's true.

24 Q. Where is the line? Is there

1 a town or a line of demarcation where you  
2 say this is southern and this not  
3 southern?

4 A. Yeah. If you look at the  
5 work by Boundy and those researchers,  
6 they did work at different talc mills and  
7 mills throughout Vermont, but there  
8 was -- there was a talc mining operation  
9 in the Northern Vermont near Johnson,  
10 Vermont, and then -- so it's really to  
11 distinguish the mines operated by Windsor  
12 Minerals Company in the southern part of  
13 the state versus those operated by other  
14 talc manufacturers in the north. There's  
15 not like a -- I don't have a latitude  
16 degree, you know, to give you, but --

17 Q. Now, the Boundy study, is  
18 that a document that you rely on to reach  
19 your conclusions in this case?

20 A. In part, yes.

21 Q. Have you reviewed any of the  
22 Johnson & Johnson internal communications  
23 about the company's influence on the  
24 Boundy study?

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1           A.       I've seen some of those  
2       during cross-examination.

3           Q.       So you've seen those  
4       documents before, the talk about Johnson  
5       & Johnson's influence on that study?

6                   MR. HYNES:   Vague,  
7       overbroad.

8                   THE WITNESS:   I wouldn't  
9       characterize it that way, but I  
10      remember phrases like let's put  
11      our best foot forward, those kind  
12      of things.

13      BY MR. OLIVER:

14           Q.       Do you remember them saying  
15      they were going to create a mystique  
16      around their process for beneficiation?

17           A.       I don't recall that.   They  
18      may have, but I don't recall the specific  
19      language, but again, those are, like,  
20      marketing decisions that I'm not speaking  
21      to.   I'm looking at the -- you know,  
22      trying to be a scientist here and  
23      actually look at data and what is found  
24      and how things are characterized and

1 identified.

2 Q. Do you remember those  
3 documents indicating that Johnson &  
4 Johnson's mine in Vermont had not been  
5 going long enough for negative results to  
6 affect them? Do you remember that?

7 A. I don't. I don't recall  
8 that. I think that deals with  
9 epidemiological studies and that's beyond  
10 my area of expertise.

11 Q. Okay. So I believe in  
12 Balderrama you opine that the talc mine  
13 in Southern Vermont is not contaminated  
14 with asbestos nor has it been  
15 contaminated in the past, right?

16 A. I do.

17 Q. Okay. Now, the town near  
18 one of these -- or sort of at the center  
19 of all this is Hammondsville, right?

20 A. The what? I'm sorry.

21 Q. Hammondsville, the town of  
22 Hammondsville is the town nearest to the  
23 Hammondsville mine, right?

24 A. It could be.

1 Q. Well, you're the mining  
2 expert here. Is it or is it not? I  
3 mean, you wrote a report on it. I just  
4 need to know.

5 A. That's not -- that's not a  
6 mining question, sir. What I'd have to  
7 do is look at the location of the mine in  
8 reference to other towns in Vermont to  
9 see if that's an accurate statement.

10 Q. Okay. All right. Well, you  
11 agree that Hammondsville is in Southern  
12 Vermont?

13 A. Yes. I'm not disputing  
14 that. I'm just trying to answer your  
15 question.

16 Q. All right. And you agree  
17 that Chester, Vermont, is in Southern  
18 Vermont, right?

19 A. Yes, it is.

20 Q. And Ludlow, Vermont, is in  
21 Southern Vermont?

22 A. That's correct.

23 Q. Can you tell me by any  
24 rational percentage how much tremolite is

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1 in the Southern Vermont mines that  
2 Johnson & Johnson used?

3 MR. HYNES: Overbroad,  
4 vague.

5 THE WITNESS: What do you  
6 mean by mine?

7 BY MR. OLIVER:

8 Q. What do I mean by mine?

9 A. Yes.

10 Q. You're asking me what I mean  
11 by mine? I'll just reask the question.

12 Can you tell me how much  
13 tremolite there is in the Southern  
14 Vermont mines that J&J used?

15 MR. HYNES: Same objections.

16 THE WITNESS: Again, you  
17 need to define -- what do you mean  
18 in that question by the term mine?

19 I need a clarification  
20 before I could answer.

21 BY MR. OLIVER:

22 Q. So without me changing my  
23 question, you're unable to answer that?

24 A. I'll answer it, but I'm

1 going to answer it this way.

2 Plaintiff attorneys love to  
3 point to documents of other areas of the  
4 mine where something like tremolite could  
5 occur. The presence of tremolite in  
6 non-talc ore rocks within the deposit is  
7 not what I'm discussing. To conflate  
8 those is scientifically inaccurate and  
9 inappropriate. I'm speaking to the talc  
10 ores that are being mined.

11 When I look at the Johnson &  
12 Johnson products from Vermont, which is  
13 the best indicator of what is in the  
14 talc, we do not find tremolite asbestos  
15 or any other form of amphibole asbestos,  
16 nor do we find chrysotile. We do find  
17 very, very low concentrations, much less  
18 than .1 percent, non-asbestos amphiboles,  
19 primarily the mineral cummingtonite.  
20 There has only been a few occurrences  
21 where we actually found tremolite, and I  
22 would defer to those test reports where  
23 tremolite was detected in a finished  
24 product of Johnson & Johnson's baby

1 powder to be able to answer that question  
2 because we have attempted to quantify  
3 that.

4 Q. So, Dr. Sanchez, you've  
5 identified without any disagreement three  
6 mines that you know for certain Johnson &  
7 Johnson used; Argonaut, Hammondsville,  
8 the Rainbow mines, correct?

9 A. I wasn't done with my  
10 answer. May I finish?

11 Q. Sure.

12 A. To answer your question, I  
13 have quantitative data of the amount of  
14 amphiboles in the actual products derived  
15 from those mines. To be able to -- I do  
16 not have the ability to go to a mine  
17 property, which could be ten square  
18 miles, and quantify how much tremolite is  
19 present in that -- under the earth at  
20 unknown depths of the mineral tremolite,  
21 but I can -- I can answer those questions  
22 specifically to the products derived from  
23 those mines and what that -- and what  
24 those minerals are.



1                   Q.       When you say the product  
2       derived from those mines, do you mean the  
3       actual containers of the baby powder or  
4       do you mean something else?

5                   A.       The actual containers of  
6       baby powder that was -- that would have  
7       been sold by Johnson & Johnson in those  
8       time periods.

9                   Q.       So I'm not talking about  
10      baby powder testing right now because  
11      baby powder is beneficiated, right?

12                  A.       It has been processed, yes.

13                  Q.       That's right.

14                             And beneficiation changes  
15      the mineral -- when you beneficiate talc,  
16      you grind it up, correct?

17                  A.       That's -- that's not part of  
18      the beneficiation, but yes, you do --  
19      your end product in these mines is a  
20      ground talc.

21                  Q.       Correct.

22                  A.       But then it goes with ore  
23      selection and ore processing, not -- not  
24      the -- not the actual end grind.

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1                   Q.       Okay. Fair enough. But the  
2 grinding changes the size of the  
3 particulate matter at issue, correct?

4                   A.       Yes, grinding would change  
5 the particle sizing.

6                   Q.       Okay. So I'm talking about  
7 the mines, not the product.

8                               So you've identified three  
9 mines, Hammondsville, Rainbow and  
10 Argonaut, right?

11                  A.       Yes.

12                  Q.       Okay. And within those  
13 mines, you don't have any testing saying  
14 how much tremolite, amphibole tremolite  
15 is in those mines, do you?

16                  A.       This is why I wanted you to  
17 define what the mine is.

18                               There is no data that would  
19 allow one to extrapolate that based upon  
20 the whole mine property. There is data  
21 to assess what was actually being mined,  
22 meaning not on the mine property, but the  
23 actual ore that is being mined and  
24 processed for the end product. We have

1       that data. If you're asking me the whole  
2       property, I do not have that data nor do  
3       I know how I would obtain that data.

4               Q.       Well, let me just be clear.  
5       How big are the mine properties, roughly?

6               A.       Multiple square miles  
7       potentially depending on the mine itself.

8               Q.       Okay. And within those  
9       multiple square miles that Johnson &  
10       Johnson owned and mined, you agree there  
11       was tremolite, right?

12              A.       Potentially, yes.

13              Q.       And you agree it was there.  
14       It wasn't potential. It was there,  
15       right?

16              A.       Well, again, you need to be  
17       specific. If you're talking --

18              Q.       I don't need to be specific.

19              A.       Yes, you do, sir. You're  
20       asking me to answer a specific question  
21       about how much tremolite is in -- is in a  
22       large scale area, but you won't even  
23       define the area you want me to try to  
24       answer your question.

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1 Q. I did. I defined the area.

2 A. I'm not done. Let me  
3 finish, please.

4 So when you start looking at  
5 different areas -- areas within the mine  
6 property, certain areas will be more  
7 enriched or have more or even have it  
8 versus others. There'll will be areas on  
9 that mine property that contain no  
10 tremolite whatsoever. There'll be other  
11 areas that could contain a lot. I do not  
12 have the information such that I could  
13 break out all the different rock types  
14 across the mine area and give, like, an  
15 average for the whole thing, but an  
16 average for the whole mine would also be  
17 misleading because there's going to be  
18 areas within that mining property where  
19 there's no amphibole whatsoever, no  
20 tremolite whatsoever. So it would really  
21 depend upon where you're at, what rock  
22 types you're looking in specific zones or  
23 localities to be able to answer those  
24 questions.

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1                   Within, like, the black  
2                   wall, for instance, the chance to run  
3                   into tremolite or actinolite or something  
4                   in the black wall material is very high,  
5                   but once you get away from the black  
6                   wall, it's very low, if non-existent.

7                   So again, the specifics  
8                   matter in order to try to answer your  
9                   question and I'm just trying to do that.

10                  Q.       So on the mine property for  
11                  any of those mines or for all of those  
12                  mines there, there was tremolite on the  
13                  property, right?

14                  A.       Yes, I wouldn't disagree  
15                  with that.

16                  Q.       Okay. And you would agree,  
17                  and I'm not talking about -- I'm not  
18                  getting into this very specific thing.  
19                  On the property for each of those mines,  
20                  just as there is tremolite, there would  
21                  also be some asbestiform tremolite,  
22                  right?

23                  A.       Not necessarily. There is  
24                  some indication in some zones that there

1        were. At least in Argonaut there was  
2        some test results that showed that, but  
3        as you start speaking to every mine --  
4        and again, it's important to where you're  
5        looking in order to assess these things,  
6        but there could be, but that -- my point  
7        is just because you have tremolite  
8        doesn't also mean you have tremolite  
9        asbestos in the same locality. So, for  
10       instance, I could in the black wall at  
11       Argonaut have tremolite mineralization  
12       within that black wall rock, and that's  
13       documented a lot of times as actinolite,  
14       I believe. And then within certain zones  
15       within the black wall or the mine itself  
16       you may actually have mineralization of  
17       tremolite asbestos, but those -- those  
18       areas where it occurs are spatially  
19       located. It's not distributed  
20       throughout. So those -- these are  
21       important. Like, again, the specifics  
22       matter in order to be able to answer  
23       these questions meaningfully.

24                Q.        What about chrysotile, is

1       there chrysotile on the mine properties  
2       of Argonaut, Rainbow and Hammondsville?

3               A.       On the -- on the  
4       serpentinite core side of the talc  
5       deposits, in some drill cuttings and  
6       other rocks we have from that material,  
7       which isn't the talc ore, but we did --  
8       we did detect in our testing some  
9       chrysotile within those serpentinite  
10      dominated rocks.

11              Q.       I'm going to mark as  
12      Plaintiffs' Exhibit 17 a document you  
13      have with you, Dr. Sanchez. It's a big  
14      one. Don't worry, we're not going to go  
15      through it in too much depth. It's the  
16      1916 Geology of Vermont talc mine  
17      Hammondsville. That's what it's --

18                   MR. HYNES: Did you say '60  
19                   or '16?

20                   MR. OLIVER: Exhibit 16.

21                   MR. HYNES: No, I'm saying  
22                   you said 1960 or --

23                   MR. OLIVER: Oh. It's 1916.  
24                   Sorry. And it's Exhibit 17. We

1           really drive the court reporter  
2           crazy there.

3                   MR. HYNES:   You might have  
4           skipped one of them earlier.

5       BY MR. OLIVER:

6           Q.       Have you located that, Dr.  
7       Sanchez?

8           A.       I don't see it.

9                   MR. HYNES:   There should be  
10       a binder clip document.

11                  MR. OLIVER:   Yeah, it's a  
12       big document, Dr. Sanchez.

13                  MR. HYNES:   The largest  
14       document in your folder.

15                  THE WITNESS:   The title page  
16       is not how you described it and so  
17       maybe that's why I'm confused.

18                  What's the title page on  
19       this thing say?

20                  MR. MAZINGO:   It's on the  
21       screen right there.

22                  MR. OLIVER:   Yeah.   Do you  
23       see that?

24                  THE WITNESS:   That's not



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1                   what you described it as, but yes,  
2                   I do have it.

3       BY MR. OLIVER:

4                   Q.       Yeah, I described what's on  
5       the folder, not what's on the actual  
6       document.   My fault.

7                   All right.   Full text.  
8       Report of the State Geologist on the  
9       Mineral Industries and Geology of  
10      Vermont.   This is publicly available.

11                   Do you see that?   Do you see  
12      that, Dr. Sanchez?

13                   A.       I'm looking at it.   Give me  
14      a moment.

15                   Okay.   I mean, I'm here.   It  
16      looks like it's a 1915-1916 published  
17      document from the state.

18                   Q.       Yeah.   That's right.

19                   And my question is:   You  
20      didn't review this before issuing your  
21      opinions in this case?   You've never seen  
22      this document before?

23                   A.       I remember looking at  
24      Chidester reports for the State

1 Geological Survey back in like the '50s  
2 and '60s. I don't -- I don't necessarily  
3 recall seeing this old of a document.

4 Q. Yeah, this one's different.

5 If you look in the upper  
6 right-hand corner, we've got the printed  
7 page numbers. And if you go to page 4 of  
8 532, you'll see the copyright  
9 information.

10 Do you see that?

11 A. Yes. That's what I was  
12 looking for.

13 Q. This was authored by or  
14 compiled by George H. Perkins, a State  
15 Geologist and Professor of Geology at the  
16 University of Vermont.

17 Do you see that?

18 A. I do.

19 Q. Okay. You don't have any  
20 reason to doubt that this is what we say  
21 it is, correct?

22 A. Not as I sit here.

23 Q. Okay. So turn with me to  
24 page 392 of 532, upper right-hand corner.

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1 A. Okay.

2 Q. All right. In the middle of  
3 the page it says, the Reading Talc and  
4 Asbestos Mine at Hammondsville is still  
5 idle.

6 Do you see that sentence?

7 A. I'm sorry. Where are you  
8 at?

9 Q. Page 392, using the upper  
10 right-hand corner numbers.

11 A. Okay.

12 Q. Okay. You're on that page?

13 A. Yes. I see where you're  
14 pointing now.

15 Q. Okay. And there's a  
16 sentence that says, the Reading Talc and  
17 Asbestos Mine at Hammondsville is still  
18 idle.

19 Do you see that?

20 A. I do.

21 Q. Okay. Did you know before  
22 looking at this that there was actually  
23 an asbestos -- a talc and asbestos mine  
24 at Hammondsville at any point in time?

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1 MR. HYNES: Calls for  
2 speculation, assumes facts.

3 MR. OLIVER: I'm sorry.  
4 Just real quick for the record for  
5 the objection.

6 I asked him what he knew.  
7 So I'll ask my question again. I  
8 want to know if there's actually  
9 an objection to that question.

10 BY MR. OLIVER:

11 Q. Did you know, Dr. Sanchez,  
12 before reading this today that there was  
13 a talc and asbestos mine being operated  
14 at one point at Hammondsville?

15 MR. HYNES: Same objection.

16 THE WITNESS: Yes, I --  
17 there are -- for example, when you  
18 look at the work done by Brad Van  
19 Gosen at the U.S. G.S. looking at  
20 prospects, asbestos occurrence in  
21 the literature and prospects and  
22 things of that nature, as you look  
23 up and down the whole Appalachian  
24 Mountain chain, chain of

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1 mountains, especially in, like,  
2 Vermont, yeah, there are plenty of  
3 occurrences and reportings of  
4 asbestos in those areas, even  
5 surrounding and near the City of  
6 Hammondsville.

7 BY MR. OLIVER:

8 Q. So you knew there was an  
9 actual, at one point an operational  
10 asbestos mine in Hammondsville?

11 A. Well, I don't know if I know  
12 that, but I'm saying is the idea that  
13 there has been documentation of asbestos  
14 in that area. I'm well aware of that. I  
15 don't know what this Reading Talc and  
16 Asbestos Mine is particularly.

17 Q. Well, you certainly don't  
18 mention that in your report, do you?

19 A. Again, I don't -- you'd have  
20 to show me a relevancy of why it would be  
21 relevant.

22 Q. Well, Dr. Sanchez, you go  
23 into court and you tell juries that  
24 there's no asbestos in Johnson's baby

1 powder because the mines, at least the  
2 talc that was mined, didn't have any  
3 asbestos in it, right? You tell juries  
4 that, fair?

5 A. You're drawing gross  
6 conflations of data and simply the name  
7 of a town isn't the same thing as the  
8 name of a particular mine or how it  
9 relates.

10 Further, when you actually  
11 look at the literature revolving the  
12 Hammondsville mine operated by Johnson &  
13 Johnson, the earlier dates of that as  
14 reported by Chidester was an open mine,  
15 very poor quality talc. It wasn't until  
16 they got deeper into the core and into  
17 new areas that they found the higher  
18 purity talc ores that they would then  
19 converted to going underground and  
20 producing potential cosmetic grade talcs  
21 from.

22 Q. So --

23 A. So even if -- even if this  
24 Reading Talc and Asbestos Mine at

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1       Hammondsville is the exact location as  
2       the Hammondsville mine operated by  
3       Windsor Mineral Company, it is clear from  
4       the record that the quality of the talc,  
5       the nature of the talc deposit varied  
6       between the earlier uses of the quarry  
7       and the later uses.

8               So again, there's -- there's  
9       all sorts of levels of detail that don't  
10      necessarily make it into my report. It  
11      doesn't mean -- it doesn't mean that I  
12      haven't considered it or evaluated it.

13             Q.       So at one point early in the  
14      Hammondsville operation they had a poor  
15      quality talc that you agree was likely to  
16      be contaminated by asbestos, right?

17             A.       No, I didn't say that. Poor  
18      talc as described by Chidester at the  
19      Hammondsville quarry I think in the late  
20      '50s was very -- was poor to like  
21      whiteness content, accessory minerals,  
22      purity of the talc itself. I do not  
23      believe that Chidester ever reports  
24      asbestos being in that material. Then

1 later on they discovered higher quality  
2 talc ores within the deposit which they  
3 then converted into an underground mine  
4 in order to access.

5 Q. Well, an accessory -- one  
6 accessory mineral to talc is asbestiform  
7 tremolite, right?

8 A. No, not as a blanket  
9 statement. If you have a talc mine which  
10 has tremolite asbestos in it and that  
11 tremolite asbestos is mined with the talc  
12 and put into a final product, you would  
13 have tremolite asbestos in the final  
14 product. The fact that tremolite  
15 asbestos exists anywhere on a talc mine  
16 does not mean that the talc mine there  
17 will have tremolite asbestos, which is  
18 spelled out in great detail in my report.

19 Q. Well, it certainly makes it  
20 more likely that that would happen?

21 A. No, because -- not if I  
22 use -- not if I use your guys'  
23 definition. If I use your guys'  
24 definition, I could report asbestos in



1 almost any dirt, any soil, any rock in  
2 the world.

3 So the important definitions  
4 are very important. Talc -- talc in and  
5 itself is no more likely to contain  
6 asbestos than any other mineral quantity.  
7 It really depends upon the nature of the  
8 mineralization and how -- and how the  
9 mining is being selective whether or not  
10 asbestos will be there. Nature controls  
11 this and you need to look into those  
12 facts and look into how the material is  
13 being processed whether that asbestos is  
14 actually being mined, if it even exists  
15 on the mine property.

16 Q. If the asbestos is mined  
17 even unintentionally in a small amount,  
18 are you aware of a way to get it out of  
19 the talc completely?

20 A. If it was mined, it would  
21 contaminate -- it would contaminate at  
22 some level the talc that was processed,  
23 assuming that the asbestos made it into  
24 the milling -- the final mills. It would

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1       contaminate that product, but it would  
2       only contaminate the product where that  
3       happened. It wouldn't contaminate  
4       products processed a week later, a day  
5       later, maybe even later that same day if  
6       that -- if that happened.

7               Q.       Dr. Sanchez, we'll go to  
8       what we're going to mark as Plaintiffs'  
9       Exhibit 18, which is a data release from  
10      the U.S. Geological Service, and we're  
11      going to mark -- so you're familiar with  
12      data releases from the U.S. Geological  
13      Service, correct?

14             A.       Is there a specific one you  
15      want me to look at?

16             Q.       Well, I'm just asking the  
17      question. You know what I'm talking  
18      about when I reference that, right?

19             A.       I only can guess because I  
20      don't know exactly what you mean by that.

21             Q.       Well, let's just look at the  
22      documents that I have in front of you.

23                       We're going to mark as  
24      Plaintiffs' Exhibit 19 the actual

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1 spreadsheet that goes with Exhibit 18.  
2 So this will be labeled -- the document  
3 itself will be labeled "Reported historic  
4 asbestos mines, historic asbestos  
5 prospects and other natural occurrences  
6 of asbestos in the conterminous United  
7 States?"

8 A. I don't see that in my  
9 folder here.

10 Q. The folder itself would say  
11 U.S. G.S. website data release, reported  
12 historic asbestos mines.

13 Did you get it?

14 A. Okay.

15 Q. Okay. And then behind that  
16 document, there's going to be a big  
17 binder or binder clip of a -- like a  
18 spreadsheet, piece of spreadsheet data.  
19 We're going to refer to those together.

20 A. I don't see that. In that  
21 folder I have -- it's a back-and-forth  
22 printed three-page document. That's it.  
23 I don't have any other large --

24 Q. You don't have any document

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1 after that?

2 It's not in the same folder,  
3 Dr. Sanchez.

4 A. What is the folder name then  
5 so I can find it?

6 Q. It's a spreadsheet from the  
7 U.S. G.S. with coordinates of Ludlow  
8 asbestos findings.

9 A. Okay. That's not what you  
10 described it as, but I do --

11 Q. Would you just cut it out?  
12 Just -- just come on. It was the next  
13 folder. Give me a break.

14 MR. HYNES: Counsel, please  
15 stop badgering the witness here  
16 because it's --

17 MR. OLIVER: I'm not  
18 badgering the witness. The  
19 witness -- I want the record to  
20 reflect the witness has been  
21 dismissive, he's been rolling his  
22 eyes, he's been disrespectful.  
23 I've been very good about keeping  
24 my temper. It's about to stop.

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1 MR. HYNES: I disagree with  
2 that, but continue.

3 MR. OLIVER: That's fine.  
4 You can have all the opinions you  
5 want.

6 BY MR. OLIVER:

7 Q. Dr. Sanchez, when you have  
8 had a second to figure all this very  
9 difficult information out, let me know.

10 A. I have the document in front  
11 of me now.

12 Q. All right. Great.  
13 So the first document that  
14 we were talking about, the one that says  
15 reported historic asbestos mines, comma.

16 Do you follow me, the web  
17 page?

18 A. Okay.

19 Q. All right. So this is a  
20 release from the U.S. Geological Service  
21 from February 25, 2019, correct?

22 A. That's the date on it, yes.

23 Q. Okay. And the second  
24 paragraph of the document describes the

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1 data release, right?

2 A. Yes.

3 Q. Okay. The first sentence  
4 explains that the data release provides  
5 site-by-site information on 876 natural  
6 occurrences of asbestos within the  
7 conterminous United States.

8 Did I read that correctly?

9 A. I believe so.

10 Q. Okay. And you don't have  
11 any reason to doubt the accuracy of what  
12 it states, right?

13 A. No. This is -- these are  
14 the publications I was referring to in  
15 one of my previous answers from the work  
16 by Brad Van Gosen to document these --  
17 these types of occurrences and prospects.

18 Q. And the last sentence  
19 indicates that a reported natural  
20 occurrence of asbestos was found in 34 of  
21 the 48 states of the conterminous United  
22 States, correct?

23 A. That's correct.

24 Q. All right. So let's look at

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1 the spreadsheet itself, which is where  
2 the data from the release is contained.  
3 Okay?

4 Now, you can either turn to  
5 it by hand or we can have Katy -- I mean  
6 Katy's going to go to it on the screen,  
7 so you can choose whichever route you  
8 want. I would suggest we look at the  
9 screen.

10 So if we go to cell number  
11 805. Katy's going to take us there.

12 Can you see on the screen  
13 cell number 805?

14 A. Yes.

15 Q. Now, you agree that that  
16 identifies an asbestos occurrence in the  
17 Chester talc mine in the Carleton Quarry?

18 A. Yes. And if you scroll  
19 over, it gives you the reference of the  
20 publication he pulled that information  
21 from.

22 Q. Right. And you agree that  
23 that is in Southern Vermont, right?

24 A. Yes, the Carleton Quarry.

1 Q. Right. And you agree that  
2 that is near Ludlow?

3 A. Southeast, but yes. It's --  
4 again -- sorry. Near is a very  
5 subjective term, but it's closer to  
6 Ludlow than to Burlington.

7 Q. And it identifies that that  
8 rock formation, at least where I'm  
9 looking at it, it is ultra -- and I'm  
10 going to mess it up. Tell me how to say  
11 it again.

12 A. Ultramafic.

13 Q. Ultramafic. I don't  
14 know why I can't say that correctly.  
15 Ultramafic.

16 That's ultramafic rock  
17 formation, right?

18 A. Yes.

19 Q. Okay. And ultramafic rock  
20 formation is also the type of rock  
21 formation that makes up the many rock  
22 formations around Johnson & Johnson's  
23 mines in Southern Vermont as well, right?

24 A. Talc deposits are formed at



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1 the contact of the ultramafic bodies in  
2 contact with the country rock.

3 Q. So you don't disagree at all  
4 that this is an occurrence of asbestos  
5 right here, that's identified here,  
6 right?

7 A. I would defer to the  
8 original publication ultimately, but no,  
9 I don't have any reason to dispute that.

10 Q. And you don't -- you don't  
11 disagree -- if I were to show you other  
12 occurrences of asbestos in Southern  
13 Vermont near Johnson & Johnson's mines,  
14 assuming that we have documentation for  
15 that, you're not going to disagree that  
16 that does exist, right?

17 A. Well, no, because as I  
18 already testified to earlier, I was well  
19 aware of this document and a summary of  
20 asbestos occurrences and prospects as put  
21 together and compiled by Brad Van Gosen.

22 Q. Right. And we're going to  
23 go actually to --

24 A. No surprise to me that up

1 and down the whole State of Vermont there  
2 are occurrences, localized occurrences of  
3 asbestos that have been documented in the  
4 literature.

5 Q. Right. And they're up and  
6 down the State of Vermont in Northern  
7 Vermont and Southern Vermont, true?

8 A. Yes. They continue down  
9 into New Hampshire, into Massachusetts  
10 and up into Maine, too. So yes, along  
11 the Appalachian Mountains there are  
12 occurrences of asbestos in localized  
13 areas.

14 Q. And your distinction in your  
15 report about Southern Vermont versus  
16 Northern Vermont, that's really  
17 meaningless as far as asbestos is  
18 concerned, isn't it?

19 A. No, it's not meaningless.  
20 You also have Northern Vermont in the  
21 serpentinite bodies. You actually have  
22 bona fide asbestos mines. So there's a  
23 very important distinction between  
24 lumping all ultramafic rocks and their

1        occurrences with asbestos all the same  
2        between northern parts of the state to  
3        the southern part of the state. Further,  
4        the metamorphic grade of the rocks I  
5        believe decreases as you work north  
6        through Vermont, which would also have  
7        different mineralization and different  
8        characterization of -- of minerals. It  
9        is very inappropriate to sit there and  
10       take big geographic areas and lump them  
11       together and treat them as the same  
12       because there will be differences in the  
13       geology as a function of space.

14                Q.        Well, they both have  
15       asbestos in them, don't they? We just  
16       went through that.

17                A.        We didn't go through  
18       anything.

19                        Yes, you will find examples  
20       of asbestos mineralization in Northern  
21       Vermont, as you would in Southern  
22       Vermont, but that is not dealing with the  
23       issue of what is in the talc ores and  
24       what is in the final products, which is

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1        what I've been asked to do, and to draw  
2        equivalencies between an asbestos mine in  
3        the northern part of the state and say  
4        it's equivalent to a talc mine in the  
5        southern part of the state is grossly  
6        inappropriate and -- and not based on any  
7        sound scientific reasoning.

8                    MR. OLIVER: All right.

9                    Let's take a break and use the  
10                   bathroom and then we're going to  
11                   go to Van Gosen.

12                   (A short recess was taken at  
13                   4:18 p.m. until 4:25 p.m.)

14        BY MR. OLIVER:

15                   Q. All right. Let's go back on  
16                   the record and we will mark as  
17                   Plaintiffs' Exhibit 20 the Van Gosen  
18                   article from 2004. I want to make sure I  
19                   got that date right. Yeah.

20                   This is an article that you  
21                   are very familiar with, correct, Dr.  
22                   Sanchez?

23                   A. I'm familiar with this  
24                   article, yes.

1           Q.     Yeah. And it's actually  
2 part of your report, isn't it?

3           A.     I do cite to this, yes.

4           Q.     Yeah. It's peer reviewed?

5           A.     It is.

6           Q.     Okay. Van Gosen examined  
7 how talc deposits were formed  
8 geologically to understand how the  
9 presence of amphiboles related to that  
10 geologic formation, right?

11          A.     Again, that's not how I  
12 would put it, but --

13          Q.     Well, that -- okay. That  
14 was a confuse -- I admit that was a bad  
15 question. I asked a bad question.

16                 Tell me how you would put it  
17 because I butchered it. Tell me what you  
18 think he was looking at.

19          A.     I -- he was -- he's simply  
20 discussing the way that a talc deposit  
21 forms as being an indicator of the  
22 potential for amphibole asbestos content.  
23 So he examines different talc regions  
24 within the United States and then kind of

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1 expounds how those -- what types of  
2 geologic processes generally were used to  
3 form those or how those were formed and  
4 then he has some information based on his  
5 own testing as it relates to, like, Death  
6 Valley, for instance, and he shows in  
7 those deposits there is amphibole type  
8 asbestos.

9 Q. So first of all, look with  
10 me at the paragraph beginning under the  
11 word asbestos.

12 Do you see that?

13 A. Okay.

14 Q. He says, asbestos is a  
15 commercial/industrial term with a long  
16 history and is not a mineralogical  
17 definition.

18 You agree with that, right?

19 A. Yes, asbestos itself is not  
20 a mineralogical name of any particular  
21 mineral species. It's an umbrella term  
22 that encompasses specific mineralogical  
23 names of different minerals and different  
24 growth habits.

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1 Q. Look with me at page 922.

2 It's the third page if you're looking at  
3 the printed copy.

4 A. Okay.

5 Q. About halfway down the  
6 page --

7 MR. OLIVER: You're on the  
8 wrong page, Katy. 922.

9 BY MR. OLIVER:

10 Q. Okay. Are you on page 922,  
11 Dr. Sanchez?

12 A. I am.

13 Q. Okay. Halfway down the  
14 page, right above study methods, right  
15 above that heading there's a sentence  
16 that says, within a single mineral  
17 deposit such as some talc or bodies,  
18 amphibole crystals may range in habitat  
19 from blocky to prismatic to acicular to  
20 asbestiform.

21 Did I read that correctly?

22 A. With one exception. I think  
23 you said habitat instead of habit.

24 Q. Okay. I didn't mean to do

1       that.

2                       Well, with that correction,  
3       did I read that correctly?

4               A.       You did.

5               Q.       Okay. And do you agree with  
6       that statement?

7               A.       Yes. If you look at the  
8       work that he did, where he derives that  
9       is from the Death Valley talc samples  
10      that he had where he found both  
11      non-asbestos amphiboles as well as  
12      amphibole asbestos in the same -- in the  
13      same ores.

14              Q.       Now, he looks at -- well,  
15      we're talking about the geological  
16      formation of the talc or body. He looks  
17      at two types of metamorphism, right?

18              A.       Well, these are broad  
19      categories, but yes, there's the --  
20      what's called -- the broad term is  
21      contact metamorphism and then regional  
22      metamorphism.

23              Q.       And in Southern Vermont  
24      we're talking about the talc deposits



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1       were formed by regional metamorphism,  
2       right?

3               A.       In the broader context, yes.

4               Q.       And regional metamorphism is  
5       one that he concludes is related to talc  
6       deposits that are amphibole rich, right?

7               A.       Yes, based -- yes, I believe  
8       as you looked at the Gouverneur talc  
9       district in Upstate New York, you have up  
10      to like 60 percent amphibole in those  
11      talc mines, and I think he's pointing to  
12      those types of occurrences for that.

13              Q.       Well, let's just look at --  
14      he divides his paper into areas that he  
15      characterizes as amphibole poor and  
16      amphibole rich, right?

17              A.       Yes.

18              Q.       Okay. And on page 927 of  
19      the article he starts identifying the  
20      amphibole-rich talc deposits that are  
21      formed by contact metamorphism, right?

22              A.       That's correct.

23              Q.       And he identifies Death  
24      Valley, true?

1 A. Yes.

2 Q. Okay. And I believe he  
3 identifies some North Carolina deposits,  
4 right?

5 A. Well, a talc deposit  
6 associated with what's called the Day  
7 Book dunite, but yes.

8 Q. Okay. And then the next  
9 amphibole-rich talc deposit that he talks  
10 about are those formed by regional  
11 metamorphism, right?

12 A. Yes.

13 Q. And the Gouverneur district  
14 in New York State is one of the  
15 amphibole-rich talc deposits he  
16 identifies, correct?

17 A. Correct.

18 Q. But he also identifies  
19 Vermont talc as part of the  
20 amphibole-rich talc deposits, right?

21 A. Broadly, yes.

22 Q. And I'm just -- give me a  
23 second. I'm trying to get to the right  
24 page.

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1                   It's page 933 where he  
2           begins to talk about Vermont talc.

3                   Do you see that?

4                   A.       I do.

5                   Q.       So this regional  
6           metamorphism is a process that -- it  
7           creates talc, right?

8                   A.       It can, yes. In these  
9           particular deposits it's forming as a  
10          reaction between the serpentinite rocks  
11          and then the surrounding country rocks.  
12          They're actually reacting together to  
13          form talc.

14                  Q.       Okay. And one of the things  
15          that he's shown about regional  
16          metamorphism is it's more likely to have  
17          amphibole material in those types of talc  
18          deposits, right?

19                  A.       If the pressure temperatures  
20          of the regional metamorphism gets to high  
21          enough grade, then yes, you will form --  
22          it's very likely to form amphibole  
23          minerals in regional metamorphic  
24          terrains.

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1 Q. And Van Gosen talks about  
2 the Vermont black wall deposits, right?

3 Do you see that?

4 A. Yes.

5 Q. Where are the black wall  
6 deposits in relationship to Southern  
7 Vermont? They're in Southern Vermont,  
8 correct?

9 A. The -- the term that is used  
10 for all of the talc deposits at the edges  
11 of the serpentinite bodies throughout  
12 Vermont are black wall-type deposits.  
13 Those are, like, local terms that are  
14 used for those deposits.

15 Q. So the deposit -- I'm sorry.  
16 Were you finished?

17 A. I was done.

18 Q. Okay. The deposits at  
19 Hammondsville, Argonaut and Rainbow are  
20 also part of black wall deposits is  
21 what -- that's what I understood you to  
22 say?

23 A. Yes.

24 Q. And Van Gosen says,

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1       black-wall talc deposits are associated  
2       spatially with serpentinite masses that  
3       in some areas host well-developed  
4       chrysotile asbestos.

5                       Did I read that correctly?

6               A.       You did.

7               Q.       Okay. And you agree that  
8       that's true, right?

9               A.       Yes, there's a large --  
10       there was a chrysotile asbestos mine up  
11       off the side of Mt. Belvedere that is  
12       hosted in the serpentinite rock in  
13       Northern Vermont.

14              Q.       Well, but he's talking --  
15       he's not talking about --

16              A.       I'm just giving you an  
17       example. I'm not disputing. I'm giving  
18       you an example --

19              Q.       Okay.

20              A.       -- of an asbestos mine such  
21       as he is describing here in the  
22       serpentinites in Vermont.

23              Q.       And in Southern Vermont, in  
24       Chester, Van Gosen sites to Zodac who

1 describes radiating masses of fibrous  
2 actinolite which had to be handled  
3 carefully as the needle-like crystals may  
4 penetrate fingers and said they are  
5 common on the dumps in a talc quarry near  
6 Chester, Vermont.

7 You're aware of that, too,  
8 correct?

9 A. Yes.

10 Q. And Chester, Vermont, is  
11 actually quite close to all of the mines  
12 that we're talking about here with  
13 Johnson & Johnson, right?

14 A. Yes. That Carleton Quarry  
15 is near Chester as well. So I think they  
16 might be referring to the same deposit  
17 there.

18 Q. So in your report, you  
19 actually take issue with something that  
20 Van Gosen says about there being  
21 amphibole asbestos in Southern Vermont,  
22 right?

23 A. No, I don't take issue with  
24 that. I take issue with the

1 misinterpretation that needle-like  
2 fibrous actinolites that can puncture  
3 your hand would be consistent with  
4 actual, like, asbestiform actinolite.  
5 There's issues with that morphological  
6 leap of somebody referencing needles that  
7 can penetrate your finger to actual  
8 actinolite asbestos.

9 The other thing that's  
10 interesting is when you actually get into  
11 the Veblen and Burnham papers describing  
12 the biopyriboles reactions at Chester and  
13 the black wall materials that they  
14 collected, they do not describe those  
15 materials as fibrous amphiboles. They  
16 describe them as fibrous biopyriboles.  
17 Further, they describe that the fibrous  
18 nature's due to the alteration to the  
19 different phases. It's not an  
20 asbestiform growth habit. They're clear  
21 on that in their 1993 paper as well.

22 So I'm only taking issue  
23 with his -- with the characterization  
24 that the language used in the Veblen

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1 Burnham, they don't use that language,  
2 which we've asked him about and he did  
3 correct via e-mail that he was incorrect  
4 to call them amphiboles. He should have  
5 used the term biopyriboles. And then the  
6 idea that needle-like crystals that could  
7 penetrate your fingers and are rigid like  
8 that are consistent with what we  
9 understand as amphibole asbestos.

10 Q. So Zodac in 1940 who  
11 actually observed these rocks observed  
12 them in the dumps near a talc quarry,  
13 right?

14 A. That particular quarry, yes.

15 Q. And he characterized them as  
16 fibrous actinolite, correct?

17 A. Radiating masses of fibrous  
18 actinolite, yes.

19 Q. Right. And you would agree  
20 that just by pure description, that  
21 describes asbestos, true?

22 A. If you look -- again, get  
23 back -- if you get back into the actual  
24 nomenclature, the term -- the term



1       fibrous is historically used in the  
2       geological literature to describe  
3       something that appears to be composed of  
4       fibers. The term asbestiform deals with  
5       the material that is actually made of  
6       fibers that are separable. So that's an  
7       important distinction on how the minerals  
8       behave, how they break, what the  
9       dimensions look like.

10               There's clear -- there's  
11       clear statements that I think I cite in  
12       my report to the idea that just because  
13       things are called fibrous does not mean  
14       that they are asbestiform. Those are not  
15       equivalent terms. So to make that leap  
16       is scientifically inaccurate.

17               Q.       Well, certainly you agree  
18       with me that Zodac was the one who  
19       observed these fibrous actinolite  
20       deposits, right?

21               A.       That were needle-like and  
22       punctured his fingers, correct.

23               Q.       Right. And they were in  
24       dumps near the talc quarry, right?

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1           A.       Yes.

2           Q.       And you don't know whether  
3       that was asbestos or not because you  
4       didn't have an opportunity to test that.  
5       All you know is what Zodac reported,  
6       correct?

7           A.       I know that if I'm dealing  
8       with amphibole asbestos, it doesn't  
9       create needles that can puncture my  
10      fingers. That seems to not be describing  
11      an asbestiform occurrence.

12                   Further, most asbestos forms  
13      as either cross-fibers or slip fibers  
14      within veins within rocks where you get a  
15      stress field that forces the fibers to  
16      grow in a single dimension.

17                   Radiating masses --  
18      actinolite, the name implies, like,  
19      star-like. It is very common for  
20      actinolite to form in radiating crystals.  
21      That does not mean that those long  
22      thin -- those long needle-like crystals  
23      that are formed in radiating patterns, as  
24      described here, is asbestos.

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1                   You can find many  
2                   occurrences in the literature of  
3                   actinolite being described as being  
4                   formed in these radial patterns. Those  
5                   are not -- those are not the same as  
6                   actinolite asbestos, and it's a leap to  
7                   make that connection.

8                   Q.       One way or the other, you  
9                   don't know whether what he was talking  
10                  about was asbestos because you haven't  
11                  tested it. That's what I'm asking you.

12                  You haven't tested the thing  
13                  that Zodac observed, right?

14                  A.       Not the specific particles  
15                  he would have observed, but I have tested  
16                  amphiboles from the black wall at  
17                  Argonaut which were needle-like, but were  
18                  not asbestiform. So I've tested  
19                  amphiboles. I have evaluated amphiboles  
20                  in the black walls from Argonaut and they  
21                  were not asbestiform, but they could have  
22                  been described as Zodac described here  
23                  accurately without being an error.

24                  Q.       Your conversation with Van

1 Gosen, when did that happen?

2 A. It was an e-mail  
3 communication between Mickey Gunter and  
4 Brad Van Gosen back in like -- ten years  
5 ago maybe, maybe a little longer as some  
6 of these -- as we're looking at some of  
7 these issues.

8 Q. Okay. And did you actually  
9 talk to Mr. Van Gosen or was it just  
10 Mickey Gunter?

11 A. Mickey Gunter sent an e-mail  
12 to him asking for a clarification on that  
13 term and he agreed that he misstated  
14 what the -- what the document -- what  
15 his -- what the publication of Veblen and  
16 Burnham actually said.

17 Q. Okay. Were you copied on  
18 the e-mail?

19 A. I don't believe so.

20 Q. Have you produced the e-mail  
21 to us in this litigation?

22 A. I know it's been produced in  
23 the past. Whether it's been produced to  
24 you personally I can't speak to.

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1           Q.     Do you know if it's been  
2     produced in the multidistrict litigation?

3           A.     I -- I wouldn't know without  
4     checking. I believe it's part of my  
5     reliance materials, but I'd have to --  
6     we'd have to verify whether that's -- I  
7     believe you said earlier that all of that  
8     was produced to you prior to the  
9     deposition.

10          Q.     Yeah. I honestly haven't  
11     looked for it. I'm just asking you if  
12     you know?

13          A.     I believe it's in there.

14          Q.     Okay. And when Mickey  
15     Gunter reached out to Van Gosen, he did  
16     so as a paid expert for Johnson &  
17     Johnson?

18          A.     No. This was before either  
19     of us -- I don't even -- I can't speak  
20     to -- I can't speak to him at that time.  
21     I don't know. I only remember working on  
22     one project with Mickey Gunter and  
23     Johnson & Johnson and it was -- it was  
24     years after that e-mail existed.

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1                   Q.       What was the context of him  
2       sending that email to Mickey Gunter?

3                           He was obviously working as  
4       a litigation consultant for someone,  
5       right?

6                   A.       Not necessarily. You'd have  
7       to ask -- I don't know. I don't know the  
8       impetus of why he would have sent that  
9       e-mail other than -- he may have just  
10      simply reviewed the document, checked the  
11      reference and the reference didn't say  
12      what Van Gosen reported it said and he  
13      wanted that -- he wanted to get that  
14      corrected.

15                  Q.       Well, one way or the other,  
16      if I wanted to know the details of that  
17      e-mail communication, I would have to --  
18      what I hear you telling me is I'd have to  
19      ask Mickey Gunter, right? You don't  
20      remember one way or the other?

21                  A.       It's been too long. The  
22      e-mail -- the e-mail communication my  
23      recollection is pretty clear. Mickey  
24      states what the purpose of the e-mail is,

1       this phrase, the actual phrase in this  
2       paper, and then I think Mickey also put  
3       the exact -- the phrases from the Veblen  
4       and Burnham paper and asked Van Gosen to  
5       clarify and Van Gosen agrees that he  
6       should have -- he should have stated  
7       fibrous biopyriboles, not fibrous  
8       amphiboles as stated by Veblen and  
9       Burnham.

10               Q.       And biopyriboles are a  
11       transitional mineral that's somewhere in  
12       between an amphibole and talc; is that  
13       right?

14               A.       No.   I -- no.   That's not --  
15       that's not accurate.   They are -- so if  
16       you're going to turn an amphibole into  
17       talc to a -- whether it's a prograde or  
18       retrograde metamorphic process or whether  
19       it's through some type of hydrothermal  
20       alteration, that's a -- that's a chemical  
21       reaction in the solid state.   As the  
22       mineral -- as those minerals react,  
23       depending on pressure and temperatures,  
24       other phases -- other minerals that

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1       aren't amphibole or even talc can -- can  
2       then form and be -- and co-exist.

3               So it's dealing with mineral  
4       reactions in the solid state that have --  
5       that have either not gone to completion  
6       or they've reached -- they've reached a  
7       point of equilibrium where multiple  
8       phases would exist in what originally was  
9       a -- was a single mineral entity.

10              Q.       Look with me in the  
11       discussion section of Van Gosen's article  
12       starting on page 935.

13              And the very first paragraph  
14       next to the last sentence Van Gosen  
15       concludes, in contrast, talc ores that  
16       form by contact or regional metamorphism  
17       are consistently intermixed with  
18       amphiboles, sometimes of the asbestos  
19       variety.

20              Based on your testimony so  
21       far today, you agree that's a true  
22       statement?

23              A.       I think it's important to  
24       put this into context of his -- of his



1 study itself. So what Van Gosen studied,  
2 for example, the -- sorry. I'm looking  
3 to make sure I get the same language he  
4 uses.

5 Yeah. So this idea that  
6 primary talc forming geological  
7 environment and then the amphibole  
8 content, but he -- but he -- his basis of  
9 his statements here are based on those  
10 talc deposits that he had looked at. So  
11 he had looked at certain Death Valley  
12 talc deposits and found amphiboles and  
13 amphibole asbestos, and I think he says  
14 in those -- in those papers locally,  
15 meaning in specific areas that they  
16 sampled they found amphibole asbestos.  
17 Wasn't necessarily disseminated  
18 throughout.

19 So his statements are based  
20 upon those deposits he looked at. I  
21 don't know if these statements would hold  
22 true if you go beyond these deposits.

23 So what I'm trying to say  
24 here is, for example, Van Gosen looked at

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1 North Carolina talc deposits, but he only  
2 looked at one that was associated with  
3 this Day Book dunite. There are other  
4 North Carolina talc deposits that he  
5 doesn't mention at all. So he doesn't  
6 take those into consideration as part of  
7 his evaluation.

8 So based on the data that he  
9 presents here, the specific deposits that  
10 he looked at, that's where he's drawing  
11 those conclusions from. Once you go  
12 beyond that, some of his conclusions may  
13 not be -- may not be appropriate.

14 Q. Well, certainly you would  
15 agree that this is a peer-reviewed  
16 publication, right?

17 A. Yeah. And again, in the  
18 context of his -- of what he's looked at  
19 here, you know, that is true, but again,  
20 you start bringing in other talc deposits  
21 other parts of the world, some of these  
22 general statements he makes and  
23 conclusions unlikely will -- will be true  
24 when other data is examined.

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1                   So his conclusions are based  
2           upon what he's looking at here and that's  
3           important to just recognize with any  
4           study, the limitations of the dataset.

5                   Q.       Okay.   So he looked at  
6           Southern Vermont talc deposits, right?

7                   A.       He did.

8                   Q.       And so his statement in the  
9           discussion that we just read would apply  
10          to Southern Vermont talc deposits at  
11          least?

12                  A.       I'm aware those statements  
13          are accurately represented, yes.

14                  Q.       Look with me at the next  
15          page, page 936, about one-third of the  
16          way down the page beginning with  
17          amphiboles right there.

18                         Amphiboles are ubiquitous in  
19          talc deposits formed by regional  
20          metamorphism most commonly as  
21          anthophyllite and tremolite, actinolite  
22          series minerals.

23                         That's a true statement as  
24          well, correct?

1           A.       No.    Again, it's true within  
2       the context of what he looked at here,  
3       but when he's talking about these  
4       regional metamorphic environments, the  
5       main example he has to work with is the  
6       upstate Gouverneur deposits.   So in those  
7       deposits you do find anthophyllite and  
8       you do find tremolite, but that doesn't  
9       mean that other talc deposits that are  
10      formed by regional metamorphism will be  
11      exactly the same as those.

12                   Even within -- even  
13      within -- even if in Vermont, the study  
14      by Sanford clearly shows as you increase  
15      northward through the State of Vermont,  
16      the regional metamorphic grade decreases.  
17      And if you look at that study, at  
18      different locations where he's analyzing  
19      these -- these very -- these narrow rinds  
20      of talc and country rock, black wall and  
21      the serpentinites, depending on where you  
22      are geographically represents different  
23      pressure temperature conditions during  
24      the regional metamorphism and you

1        actually get different minerals occurring  
2        and even different amphibole minerals  
3        occurring. So some of the statements  
4        here are true within the dataset that Van  
5        Gosen may have been looking at, but to  
6        take them as general statements true  
7        everywhere would be -- is not -- would  
8        not -- that would not be a sound  
9        scientific approach.

10                Q.        Dr. Sanchez, do you agree  
11        that the sentence I read is true within  
12        the dataset that he looked at?

13                A.        Yes.

14                Q.        The next sentence says, the  
15        crystal habits of the amphiboles are  
16        quite variable in these metamorphic talc  
17        deposits commonly ranging from blocky to  
18        prismatic to acicular to asbestiform  
19        within a single outcrop.

20                                Did I read that correctly?

21                A.        You did, and the data that  
22        he bases --

23                Q.        I mean, let me -- thank you  
24        for the answer. Let me follow up.

1           A.       I agree there, but it is  
2       true within the examples that he provides  
3       within his paper that were part of his  
4       dataset that he was drawing his  
5       conclusions from.

6           Q.       All right. Lower down it  
7       talks about -- about two-thirds of the  
8       way it says, in contrast, the black wall  
9       deposits in Vermont. Give me a second to  
10      get there.

11                   Right -- do you see it? Can  
12      you see that, Dr. Sanchez?

13           A.       I do.

14           Q.       In contrast, the black wall  
15      deposits in Vermont which form by  
16      regional metamorphism and metasomatism of  
17      ultramafic -- I messed that up again --  
18      rocks are zone deposits in which some of  
19      the talc intervals up to a few meters  
20      thick are often of high purity. The  
21      adjacent rock sequence can contain  
22      actinolite, tremolite, anthophyllite  
23      and/or cummingtonite locally occurring in  
24      fibrous habitats.

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1 Did I read that correctly?

2 A. Again, it's habits, not  
3 habitats, but yes.

4 Q. Sorry. I keep saying that.

5 Okay. And that would apply  
6 to the dataset he looked at. That would  
7 be true as to the dataset he looked at?

8 A. Yes, or his interpretation  
9 of his dataset, yes.

10 Q. The next sentence says, the  
11 examples from New York and Vermont as  
12 well as the talc districts in Georgia,  
13 Alabama and Texas, described earlier,  
14 demonstrate that talc deposits formed by  
15 regional metamorphism are consistently  
16 associated with amphiboles, sometimes  
17 with asbestiform habits, but their  
18 amphibole distribution is variable and  
19 deserves site-specific geologic  
20 examination and sampling.

21 Is that a true statement  
22 with regard to the dataset that he looked  
23 at?

24 A. It is, and I think that

1 is -- that is a general principle that  
2 should be applied everywhere, that the  
3 idea of regardless of the formation  
4 conditions, what you suspect may be  
5 there, if you really want to know, you  
6 need to go and evaluate it in some manner  
7 that would be appropriate to answering  
8 the question.

9 Q. And earlier when we were  
10 looking at a document from 1973, you  
11 testified that prior to that time period,  
12 Johnson & Johnson was not using  
13 magnification or optical microscopy to  
14 test its talcum powder, correct?

15 MR. HYNES: Misstates  
16 testimony.

17 THE WITNESS: You're  
18 referring to the document that  
19 describes the need to not just --  
20 not just -- I think they put it as  
21 the clean mine approach.

22 BY MR. OLIVER:

23 Q. That's right.

24 A. Yeah, I think they were



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1        talking about needing to -- needing to do  
2        more than just -- than just their belief  
3        that the mine source is clean.

4                Q.        Right. And so when they  
5        were using the Italian talc mine, they  
6        were just working off of their belief  
7        that the mine source was clean?

8                A.        Again, I don't know the  
9        basis of their knowledge of why they  
10       believed it was clean. So I don't want  
11       to give the impression that they just  
12       somehow magically or without any thought  
13       or any evaluation assumed it was clean.  
14       I don't know the processes they would  
15       have gone through to have that  
16       understanding, but again, that's speaking  
17       to issues that I can't -- I can't speak  
18       to the mines and corporate behavior. I  
19       don't -- I don't know -- I don't know  
20       that information.

21                        MR. OLIVER: Madam Court  
22       Reporter, can you tell me how much  
23       time we have?

24                        (Discussion held off the

1 record.)

2 BY MR. OLIVER:

3 Q. Dr. Sanchez, in your report  
4 and your -- actually, I'm going to go one  
5 additional document. I'm not finding  
6 this one.

7 Dr. Sanchez, I'm going to  
8 ask you some questions about your  
9 definition of how to determine if  
10 something has an asbestiform habit, but  
11 before I do that, I'd like to introduce  
12 exhibit -- Plaintiffs' Exhibit 21 which  
13 is a memo with an Imerys Bates stamp on  
14 it. It should say 92 Luzenac memo.

15 You may not have this, Dr.  
16 Sanchez. If you don't see it, then we'll  
17 just have to refer to the one on the  
18 screen.

19 A. What was the -- what should  
20 the tab on the file be?

21 Q. It should say something  
22 about Luzenac memo.

23 MR. HYNES: I don't think  
24 it's in the redweld.

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1 MR. OLIVER: Okay.

2 BY MR. OLIVER:

3 Q. All right. So we're just  
4 going to have to refer to the document on  
5 the screen, Dr. Sanchez.

6 MR. OLIVER: Katy, if we can  
7 blow that up a little bit so he  
8 can see it and I can see it.

9 BY MR. OLIVER:

10 Q. Okay. Dr. Sanchez, first of  
11 all, if you go all the way down to the  
12 bottom of the page on the right, you'll  
13 see that this is an Imerys document.

14 Do you see that Bates label?

15 A. I do.

16 Q. Okay. And do you agree that  
17 that Bates label is an indication that  
18 this was produced by Imerys?

19 A. I don't -- I mean I see that  
20 there's a Bates stamp with Imerys on it,  
21 but I can't go any further than that,  
22 it's origin or authenticate it. I have  
23 no idea, but it does have an Imerys Bates  
24 stamp.

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1                   Q.     All right. So look up at  
2     the top of this document. This was a  
3     memo from the Luzenac Group.

4                   You see that on the top  
5     right, correct?

6                   A.     Okay.

7                   Q.     You agree with that,  
8     correct?

9                   A.     It's faded, but it does  
10    appear to say Luzenac Group.

11                  Q.     And at one point before you  
12    were hired by Johnson & Johnson, you were  
13    hire by Imerys, right?

14                  A.     That's true.

15                  Q.     And you know from reviewing  
16    the documents from Imerys that Luzenac  
17    was the group during this time period  
18    that was actually operating the Vermont  
19    mines for Johnson & Johnson, among other  
20    people, right?

21                  They were selling to Johnson  
22    & Johnson and other -- other companies,  
23    correct?

24                  A.     Yes.

1                   Q.       Okay. And the date on this  
2       is October 27th, 1992, and it says Ludlow  
3       to the left of that date, correct?

4                   A.       Okay.

5                   Q.       Dr. Sanchez, please don't  
6       answer a question by saying okay. I  
7       understand it's just common practice, but  
8       you've just got to say yes, I see that, I  
9       agree it says that. You can't say okay  
10      because that's somewhat ambiguous as an  
11      answer. Okay?

12                           I'm not trying -- it's just  
13      like nodding your head, right? I know --

14                  A.       You just said okay to me.  
15      I'm sorry. I'll try not to say okay.  
16      Sorry. You keep saying okay to me, so  
17      I'm sorry.

18                  Q.       Who's on first. I got you.  
19      It's hard to do. I understand it's  
20      frustrating to go through this construct.

21                           Anyway, up at the top it  
22      says Ludlow. You understand that to be a  
23      reference to Ludlow, Vermont, right?

24                  A.       It appears to be, yes.

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1 Q. And the date is October '92,  
2 correct?

3 A. That's correct.

4 Q. And it says visit of JP  
5 Grange to Vermont operations. That is  
6 what is written at the top, right?

7 A. Yes.

8 Q. And if you look under the  
9 first subject heading, what is the first  
10 subject heading?

11 A. It says ore quality.

12 Q. And the second paragraph,  
13 what does the second paragraph define as  
14 the major problem in Vermont?

15 A. It just says the mining  
16 method is the major problem in Vermont.  
17 The ore bodies contain a variety of ores  
18 with very different qualities. The ore  
19 changes completely on very short  
20 distances. A highly selective mining  
21 method must be enforced in order to  
22 supply the right ore grade to each end  
23 product.

24 Q. The second -- the next

1 paragraph down, what does it identify as  
2 the single criterion being used for  
3 mining decisions?

4 A. Well, this states, the cost  
5 of mining seems to have been -- seems to  
6 have been be the single criterion for  
7 mining decisions at the expenses of the  
8 quality aspects. The consequences has  
9 been very detrimental to the cost of  
10 processing, and there's a handwritten  
11 question mark.

12 Q. And just below it, it  
13 identifies the five mines in the  
14 operation, right?

15 A. Okay. Yes.

16 Q. Argonaut was a mine that  
17 Johnson & Johnson was taking its talc  
18 from, correct?

19 A. Yes.

20 Q. Rainbow was a mine that  
21 Johnson & Johnson was taking its talc  
22 from, correct?

23 A. May have been, yes.

24 Q. Well, in your report you say

1       it was?

2               A.       Again, I just defer to those  
3 documents where I believe it was  
4 qualified as an ore source, but I don't  
5 know if it was ever actually used.

6               Q.       You actually told me that  
7 Johnson & Johnson may have also been  
8 taking talc from the Black Bear Mine,  
9 correct?

10              A.       No, that's not what I said.  
11 I said that there were other sources that  
12 were labeled as potential like --  
13 potentially to be used, but I don't know  
14 if they were, and without checking the  
15 records, I don't know if Black Bear or  
16 Troy would be those. I'd have to check  
17 to see which -- which other mines were  
18 referenced as a potential, like,  
19 alternative ore source.

20              Q.       Okay. What about the Hamm  
21 Mine, what do you know about that? Was  
22 that ever a Johnson & Johnson source?

23              A.       It's not clear to me. It  
24 could have been, but I've not seen it



1 clearly stated that it was.

2 Q. If you look at the second  
3 page of this memo, it says arsenic.

4 Do you see that?

5 A. Yes.

6 Q. It says, arsenic is present  
7 in all Vermont ores and the different  
8 mineral species, arseno-pyrites,  
9 sulfides, et cetera, some are soluble and  
10 create problems. The insoluble are not  
11 detected by the J&J tests.

12 Did I read that correctly?

13 A. You did.

14 Q. Were you aware of that issue  
15 with arsenic in the Vermont ores that  
16 were supplied to J&J?

17 A. Yes. The issue is there's  
18 a -- as part of the testing that we do  
19 for Johnson & Johnson is to check for  
20 minerals like arsenic. There are testing  
21 protocols that are mandated for those  
22 tests which deal with the -- you use --  
23 you use a compound to dissolve potential  
24 arsenic bearing minerals out. Those are

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1 the soluble phases and then you determine  
2 the arsenic from the soluble phases.

3 Q. And according to this memo  
4 from Luzenac, the J&J testing in 1992 did  
5 not detect the insoluble arsenic,  
6 correct?

7 A. Even the current USP talc  
8 methodology to test for heavy metals I  
9 still believe use a solubility test to --  
10 to release the arsenic into a form that  
11 can then be measured by I think it's AA,  
12 atomic absorption spectroscopy, so that  
13 that problem -- again, it's an analytical  
14 issue; how -- how is the testing being  
15 required and what does the testing do and  
16 how does it -- and what does it  
17 determine.

18 Q. Look with me at the third  
19 page under the heading the ways to a  
20 solution.

21 A. Okay.

22 Q. It says that J&J is under  
23 two contradictory trends. What are the  
24 two contradictory trends that this

1       Luzenac memo identifies?

2               A.       This states, J&J is under  
3       two contradictory trends; the new  
4       management, profit orientated and  
5       strongly motivated to get the two million  
6       savings from, quote, 250 talc, unquote.  
7       On the other hand, the 30 years of  
8       experience of extreme quality concern  
9       with Windsor. We must do our best to  
10      flatter the taste of their technicians to  
11      play with our plan as if it was their  
12      own. Frighten them with the risk of  
13      non-quality with unknown and cheap  
14      suppliers and set actual improvements on  
15      our production scheme to bring enough  
16      price reduction to calm the top  
17      management's saving desire. The talc  
18      purchase price is only 11 percent of  
19      their turnover.

20              Q.       When you've pulled your  
21      opinions about the quality of the product  
22      coming out of Johnson & Johnson's mine,  
23      you were not familiar with this document?

24              A.       No. I looked at the actual

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1 testing of the talc, the processes of how  
2 the talc was tested and I tested the talc  
3 myself.

4 Q. But you're certainly not in  
5 a position to contradict this memo  
6 statements about J&J's management  
7 priorities in 1992, are you?

8 A. I have no knowledge of J&J  
9 business practices, internal corporate  
10 decision-making of any nature.

11 Q. So let's talk about the U.S.  
12 Pharmacopeia real quick. We talked about  
13 that a little bit.

14 Now, we'll mark as  
15 Plaintiffs' Exhibit 22 -- Dr. Sanchez,  
16 I'm sorry. You don't have a copy of  
17 this. We'll put it on the screen. This  
18 is just something that -- I've been  
19 working on this sort of till the last  
20 minute, so...

21 Is this an e-mail that you  
22 have previously reviewed?

23 A. I've been shown this e-mail  
24 in cross-examination.

1                   Q.       And Ed McCarthy is with Rio  
2       Tinto Minerals, correct?

3                   A.       At the time of the e-mail,  
4       yes.

5                   Q.       And Julie Pier is with Rio  
6       Tinto Minerals, correct?

7                   A.       At the time of the e-mail,  
8       yes.

9                   Q.       You've reviewed other  
10       documents from Julie Pier that relate to  
11       asbestos testing and Johnson & Johnson,  
12       correct?

13                  A.       Very few. I've seen  
14       materials shown to me in my  
15       cross-examination, but again, I do not --  
16       I've never been shown the full records  
17       about any issues that she may or may not  
18       raise.

19                  Q.       Regardless, from your review  
20       of the records in this case, you  
21       understand that Rio Tinto Minerals was  
22       the ultimate parent company of the mining  
23       operation that was supplying Johnson &  
24       Johnson in 2011?

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1           A.       Yes. I believe they  
2       bought -- yes. Again, the company kept  
3       getting sold at different times. At this  
4       time that was the entity.

5           Q.       About -- and this 2011 is  
6       about the time you began working with the  
7       USP, right?

8           A.       No.

9           Q.       When did you begin working  
10      with the USP?

11          A.       Some 2015 or 2016. I forget  
12      the exact year.

13          Q.       I could have sworn you said  
14      2011 earlier, but either way, we'll go  
15      back and look.

16                    At the time in 2011, you  
17      were working for RJ Lee?

18          A.       That's correct.

19          Q.       Okay. Now, about six  
20      paragraphs down I have highlighted in red  
21      and yellow the problem however is more  
22      general than that for us when the USP.

23                    First of all, you agree  
24      there USP stands for U.S. Pharmacopeia,

1 correct?

2 A. Okay.

3 Q. Do you agree with that?

4 A. That -- what was the  
5 question? I'm sorry. Yeah. I mean I --  
6 the USP, okay. Yes.

7 Q. That stands for U.S.  
8 Pharmacopeia there, correct?

9 A. Yes.

10 Q. And the sentence says, when  
11 the USP asked for input on a rewrite of  
12 the talc spec, not a single user of talc  
13 put someone up.

14 I read that correctly,  
15 right?

16 A. Okay. Yes.

17 Q. Okay. And USP was writing  
18 or rewriting the specifications for talc,  
19 right?

20 A. The first talc expert panel  
21 there was a -- the FDA requested that the  
22 USP look to update their talc monograph  
23 to add more specificity in the testing  
24 requirements for asbestos and also to

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1 evaluate mine sources. That is the work  
2 that the first panel did and they  
3 published a stimuli I believe in 2015.  
4 It was after that stimuli that the next  
5 talc expert panel was convened in order  
6 to design the actual -- to update the  
7 specificity of the testing.

8 Q. And were you involved in the  
9 second one or the first one?

10 A. The second one is ongoing,  
11 and I have been involved since, I think,  
12 2016 in that -- in that work.

13 Q. Okay. So Ed McCarthy from  
14 Rio Tinto says that for the first go  
15 around of this, J&J offered up RJ Lee, an  
16 entity closely associated with RT  
17 Vanderbilt for the last 20 years of  
18 litigation as their representative.

19 Did I read that correctly?

20 A. You did.

21 Q. And you agree that RJ Lee  
22 had been closely associated with RT  
23 Vanderbilt because they testified on RT  
24 Vanderbilt's behalf in litigation for



1 many years?

2 A. I know that other  
3 individuals at RJ Lee Group have done  
4 work for RT Vanderbilt in the past, but I  
5 don't -- I don't know if this is an  
6 accurate representation from Ed McCarthy  
7 of what that work is. I've not -- I was  
8 not involved with that work.

9 Q. Well, Mr. McCarthy goes on  
10 to say one of the words that are used to  
11 describe RJ Lee in respected science  
12 circles starts with W.

13 Did I read that correctly?

14 A. You did.

15 Q. And what -- what do you  
16 interpret W to mean there? What word is  
17 he referring to?

18 A. I'd only be guessing.

19 Q. Well, why don't you give it  
20 your best guess?

21 A. Might be whore, but I think  
22 that is a very unfair characterization of  
23 the work that I do at RJ Lee Group.

24 Q. The reason that Ed McCarthy

1       would say something like that is because  
2       there's an implication that RJ Lee will  
3       simply do whatever its clients ask it to  
4       do for money.

5                       Is that a fair  
6       interpretation of what Mr. McCarthy is  
7       insinuating?

8               A.       No.

9               MR. HYNES:   Form.

10              THE WITNESS:   I think you  
11       need to ask Mr. McCarthy what he  
12       means by that term.   I've never  
13       met Mr. McCarthy.   I've never done  
14       work for Mr. McCarthy.   I have no  
15       knowledge of the basis of why he  
16       would say such a -- if that's the  
17       word he meant to use, why he would  
18       say such a -- such a coarse word  
19       to describe individuals or a whole  
20       company as a whole.

21       BY MR. OLIVER:

22              Q.       Flipping to the next page,  
23       first full paragraph of the next page,  
24       there's a sentence that begins, in the

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1 case of the USP rewrite, we need to make  
2 clear to J&J that RJ Lee is not the type  
3 of organization we have comfort with on a  
4 fundamental ethical basis and their  
5 association with RT Vanderbilt in the  
6 scientific and legal sphere renders them  
7 incapable of doing anything but damage to  
8 the reputation of talc in the public  
9 trust.

10 Did I read that correctly?

11 A. You did.

12 Q. Do you think that's a fair  
13 characterization by Mr. McCarthy?

14 A. What?

15 Q. What he just -- what is  
16 written there, what I just read, is that  
17 a fair statement by Mr. McCarthy?

18 A. Not in my experience with RJ  
19 Lee Group. Not at all.

20 Q. Have you gone out and asked  
21 anybody in the respected scientific  
22 circles what they think about RJ Lee's  
23 work for industry?

24 A. Who would those circles be,

1       sir?

2                   Q.       Well, you're in the  
3       industry. I don't -- I don't know.  
4       You're the industry guy. If you can't  
5       name them, I can't help you there. I'm  
6       asking you the questions.

7                   A.       I've worked for RJ Lee Group  
8       since the year 2007. I've never been  
9       pressured or asked to do anything by RJ  
10      Lee Group that would compromise the data  
11      and the reality of what are in samples.  
12      I've never been pressured by industry to  
13      change my results to something that they  
14      wanted. We do not do that in my  
15      experience at RJ Lee Group and my --  
16      again, I can only speak to my experience  
17      and the projects I've worked on over the  
18      years and the projects that I lead.  
19      These are not fair characterizations of  
20      myself and my colleagues at RJ Lee Group  
21      that I've worked with over that time  
22      frame. I do not know the basis for Mr.  
23      McCarthy's statements as such. The  
24      scientific circles that I work with and

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1 work within, they actually come to RJ Lee  
2 Group because of our reputation as being  
3 a laboratory that will defend their  
4 results, a laboratory that is capable of  
5 proper mineral identification, and very  
6 capable of it with very sophisticated  
7 state-of-the-art instrumentation to do  
8 such work.

9 Q. In 2018 you're aware that  
10 the FDA asked Johnson & Johnson to  
11 recommend some scientists that it could  
12 rely on for identifying asbestos in talc,  
13 right? You're aware of that?

14 A. I don't believe I am.

15 Q. You didn't know that in 2018  
16 the FDA asked J&J to make some  
17 recommendations of scientists that could  
18 do testing for asbestos in talc?

19 A. I'm not aware of that.

20 Q. Okay. Well, one of the  
21 names that J&J suggested was RJ Lee, and  
22 I believe it was your name.

23 Did you know that?

24 A. No.

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1 Q. Okay. One of the names that  
2 J&J suggested was a man named Andre  
3 Saldibar (ph) from A&A Labs.

4 You do know that name,  
5 right?

6 A. I know who he is, yes.

7 Q. Okay. And he ultimately did  
8 the 2019 testing that identified  
9 chrysotile asbestos in Johnson's baby  
10 powder, right?

11 A. Yes. A&A has been doing  
12 testing on that FDA monitoring program  
13 for cosmetic talcs. Their first -- their  
14 first testing I think came out in about  
15 2011. I think he's always -- he's been  
16 their -- the sole lab that have been  
17 testing those, at least for the results  
18 that they've published.

19 Q. Well, the FDA certainly  
20 hasn't hired you to do their asbestos  
21 testing, right? They hired Mr. Saldibar?

22 A. That's what I stated. Mr.  
23 Saldibar of A&A has been conducting that  
24 testing for the FDA well before 2018, but

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1 I'm just -- I'm just stating what I know  
2 about Mr. Saldibar.

3 Q. Has the FDA ever hired you,  
4 Dr. Sanchez, to do any asbestos testing  
5 at all?

6 A. Not the FDA, no.

7 Q. Dr. Sanchez, let's switch  
8 gears here a little bit.

9 One of your major opinions  
10 that you offer with -- well, first of  
11 all, in these cases you reviewed the  
12 testing and the testing results of Dr.  
13 Longo and Rigger, correct?

14 A. They're one and the same,  
15 but yes, as far as their results, but  
16 yes.

17 Q. The results -- the results  
18 themselves are one and the same, right,  
19 not the people?

20 A. Well, the people are  
21 different, but they're relying upon the  
22 same datasets for their opinions. They  
23 were all conducted at --

24 Q. Fair enough. Fair enough.

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1                   And my first question is, do  
2                   you agree that in some of the baby powder  
3                   in rail car samples that Drs. Longo and  
4                   Rigger found the mineral tremolite?

5                   You agree with that in some  
6                   instances, correct?

7                   A.       Yes, there is some amphibole  
8                   in the talcs that are being derived from  
9                   Vermont.

10                  Q.       Okay. And you agree that  
11                  those amphibole fragments meet the  
12                  federally mandated counting rules for  
13                  identification of asbestos, correct?

14                  MR. HYNES:   Form.

15                  THE WITNESS:   No, they do  
16                  not.

17                  BY MR. OLIVER:

18                  Q.       And maybe that's where our  
19                  disagreement is.

20                  So your opinion is that in  
21                  order to truly be counted as asbestos or  
22                  an asbestos fiber or an asbestos bundle,  
23                  what you find in baby powder bottles must  
24                  have grown in an asbestiform habit, fair



1       enough?

2               A.       That is the definition of  
3       asbestos used by the regulatory agency  
4       and in the methodologies that are  
5       promulgated by the regulatory agencies  
6       for the detection of asbestos in bulk  
7       materials, you are required to make that  
8       determination according to the methods.  
9       The counting criteria only come into play  
10      once asbestos had been established  
11      present in an environment and you are  
12      doing air clearance monitoring or  
13      exposure assessment monitoring, but that  
14      is after the presence of asbestos has  
15      been established through both testing  
16      means.

17              Q.       Dr. Sanchez, can you just  
18      walk -- well, first of all, let me start  
19      out do you believe there's an aspect  
20      ratio? I hear 3 to 1, 5 to 1, 10 to 1,  
21      20 to 1.

22                      What is your aspect ratio  
23      that you require for the identification  
24      of an asbestos fiber, the one you rely

1 on?

2 I'm not saying you made it  
3 up, but whoever you rely on, what is the  
4 aspect ratio you rely on?

5 A. You do not use an aspect  
6 ratio criteria cutoff to say whether a  
7 single particle is asbestos or not. It  
8 cannot do that reliably. What you do is  
9 you have to use -- the only way to do it  
10 reliably is to look at the population  
11 characteristics that are outlined and  
12 detailed in the OSHA methodologies, with  
13 the EPA methodologies, in the ISO  
14 methodologies for the determination of  
15 asbestos. I use those definitions in  
16 assessing whether or not asbestos is  
17 present.

18 Q. Now, what do you mean when  
19 you say population characteristics?

20 A. They're spelled out in  
21 the -- in the test reports. So the  
22 generally accepted testing report,  
23 testing methodology like an ISO 22262-1,  
24 it requires morphological confirmation

1       that what you're seeing in a sample is  
2       asbestiform in order for it to be  
3       asbestos. They then define what they  
4       mean analytically by the term asbestiform  
5       having various characteristics, and you  
6       need to see those characteristics in the  
7       particles in order to conclude that you  
8       do have asbestos.

9               Q.       So talc when it's -- when  
10       it's processed for use in cosmetic  
11       powder, as we discussed earlier, is  
12       ground up, correct?

13              A.       The final product is ground,  
14       yes.

15              Q.       And you understand that if  
16       there were, for example, a 20 to 1 aspect  
17       ratio tremolite asbestos fiber and it  
18       were put through the grinding process,  
19       it's very likely that it's no longer  
20       going to be a 20 to 1 aspect ratio once  
21       the grinding process is done, correct?

22              A.       That's why you don't use a  
23       simple aspect ratio for the  
24       determination.

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1           Q.       When you're looking at a  
2       particle that's a 5 to 1 aspect ratio  
3       greater than 5 microns in length, when  
4       you're looking at that particle and it  
5       came from a bottle of Johnson's baby  
6       powder, how do you determine that it was  
7       in an asbestiform habit, that it grew in  
8       an asbestiform habit?

9                   What are the things that you  
10      measure to make that determination?

11          A.       I observe the morphology as  
12      required and spelled out in the  
13      methodology. If you have an asbestiform  
14      component of an amphibole or serpentine  
15      mineral, it will have various -- it will  
16      have various morphological properties  
17      that are recognizable even after  
18      grinding. To that point, if you look at  
19      the USP work we recently published and  
20      put forward, we actually ground amphibole  
21      and amphibole asbestos with the talc to  
22      simulate that process. The asbestiform  
23      characteristics of the amphibole asbestos  
24      that was used were still recognizable

1 even after grinding following that  
2 methodology showing that the generally  
3 recognized procedures to do that in the  
4 methods that are already promulgated and  
5 accepted reliably make those distinctions  
6 when you look at it as from the  
7 population perspective. Since no single  
8 particle will exhibit all attributes of a  
9 population, it's very difficult to do it  
10 on a single particle. You need to look  
11 at multiple particles. The bigger the  
12 particle, the more likely you are to see  
13 those telltale features, the bundle  
14 characteristics in that material, but you  
15 evaluate that as stated and as described  
16 in the methods.

17 Q. What are you reading from?

18 A. I'm not reading anything,  
19 sir.

20 Q. You're not -- you're not  
21 reading -- I'm sorry. I thought you were  
22 reading from something. I just -- you  
23 were looking down at something. I'm  
24 almost positive you were reading from

1 something. Okay.

2 A. I'm just twiddling my  
3 fingers. Sorry.

4 Q. Okay. Great.

5 So list for me each of the  
6 things that you're looking for when you  
7 look at one of these particles. Like  
8 each -- one, two, three, what are they?

9 A. You observe the morphology.  
10 You look to see if the morphology has  
11 bundle characteristics; splayed ends,  
12 split ends, what are the type of aspect  
13 ratios of the particles, excluding the  
14 bundles. Asbestos has a unique  
15 morphology. You look for those features  
16 as spelled out in the testing  
17 methodologies. If you aren't seeing  
18 those types of features, you're not  
19 dealing with amphibole asbestos.

20 Further, if you go back to  
21 the Campbell papers, those are referenced  
22 heavily in the methodologies for  
23 terminology as well as used by OSHA  
24 directly to make the determination

1       whether things are asbestiform or not.  
2       They also spell out similar  
3       characteristics, true bundles,  
4       splittings, the individual fibers having  
5       high-aspect ratios, things of that  
6       nature.

7               Q.       Well, the individual fibers  
8       we've already determined would not in  
9       this instance have high-aspect ratios  
10      because they've been ground, correct?

11               MR. HYNES:   Misstates  
12      testimony.

13      BY MR. OLIVER:

14               Q.       It's probably a lot less  
15      likely with a product like baby powder,  
16      right?

17               MR. HYNES:   Misstates  
18      testimony.

19               MR. OLIVER:   Can we -- I  
20      want the record to reflect that  
21      when I ask a question, the witness  
22      is rolling his eyes and looking  
23      over to the side. This has been  
24      happening the whole deposition. I

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1 mean, I've been very patient and  
2 I'm going to keep being patient,  
3 but it's just rude. Can we not do  
4 that --

5 MR. HYNES: I disagree.

6 MR. OLIVER: -- to each  
7 question?

8 THE WITNESS: What was the  
9 question?

10 BY MR. OLIVER:

11 Q. We've already established --  
12 you listed high-aspect ratio as one thing  
13 you would like to confirm, right, but in  
14 a product like talc, you can't -- my  
15 question was: In a product like talc,  
16 you can't rely on a high-aspect ratio  
17 because it's been ground up and studies  
18 show that the grinding will decrease the  
19 aspect ratio.

20 That's a true statement,  
21 isn't it?

22 MR. HYNES: Mischaracterizes  
23 testimony.

24 THE WITNESS: You're



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1           referring to one study by Payne  
2           where the aspect ratios upon the  
3           grinding of the specimens that  
4           they had did reduce aspect ratio.  
5           However, as I stated earlier,  
6           there are many studies that show  
7           grinding effects of -- on asbestos  
8           and on non-asbestos amphiboles.  
9           While there may be in individual  
10          cases of particles some reduction  
11          of aspect ratio, it does not  
12          destroy the characteristics of  
13          asbestos. So, for instance, we --  
14          in the USP talc work, we wanted to  
15          address that issue to make sure  
16          that that statement was -- would  
17          not -- like if you had a ground  
18          talc, that it would not affect our  
19          ability to detect asbestos on the  
20          backside, meaning after it had  
21          been ground. So we tested that.  
22          We put in tremolite asbestos into  
23          a talc sample and ground it much  
24          more vigorously than would be

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1 ground for a body powder. We took  
2 it to the extreme. We were still  
3 able to detect and recognize the  
4 asbestiform features as described  
5 in the analytical testing  
6 methodologies that I rely upon.

7 BY MR. OLIVER:

8 Q. So you could still observe  
9 splayed ends?

10 A. Yes. It does not --  
11 grinding does not destroy the asbestiform  
12 habit. You will still -- if it is  
13 present, you will still see those  
14 features. It does not affect it to a  
15 great enough degree to destroy those  
16 features. We showed that and it's  
17 been --

18 Q. We're getting somewhere.  
19 We're getting somewhere. If you stop  
20 giving -- just answer my question.

21 You're saying grinding does  
22 not destroy splayed ends. That's a true  
23 statement according to you, right?

24 A. That's correct. You do

1 not -- again, I'm answering your  
2 question.

3 Q. I understand. I understand,  
4 but you're going on and on. I just need  
5 a yes because I want to know the next  
6 thing it doesn't destroy is and you're  
7 going to talk for ten minutes and wasting  
8 my time.

9 So what other --

10 A. Let me finish my answer.  
11 You didn't let me finish.

12 Q. Go ahead, Dr. Sanchez. Go  
13 ahead.

14 A. Grinding asbestos does not  
15 destroy the features that are  
16 recognize -- that remain viable to  
17 recognize whether you're dealing with  
18 asbestos in a sample. Of course grinding  
19 something will change -- will change it  
20 to some degree, but the issue is does it  
21 change it enough not to be able to  
22 recognize it anymore, and study after  
23 study has tested that proposition and the  
24 facts of the matter are, even if you

1       grind asbestos with talc, even beyond --  
2       even with more vigorous action than would  
3       be found in a body powder, you are --  
4       those telltale asbestiform  
5       characteristics still occurring in  
6       bundles, seeing splayed ends, seeing some  
7       curvature, long thin particles, very  
8       high-aspect ratio, all of those features  
9       still exist in those samples. It does  
10      not destroy your ability to recognize it.

11             Q.       So you listed splayed ends,  
12      curvature. Did you list tensile  
13      strength?

14             A.       Curvature is a manifestation  
15      of textile -- of tensile strength.

16             Q.       So it does or is it really  
17      the same thing?

18             A.       Particles that are flexible  
19      have high tensile strength by definition.  
20      That's what it means. So the ability to  
21      still see those features is evidence of  
22      that -- of that high tensile strength of  
23      the mineralization.

24             Q.       Would those -- would those

1 aspects of asbestiform particles also  
2 apply to chrysotile fibers?

3 A. More so. Chrysotile is --  
4 is much harder to break up and to destroy  
5 the asbestiform characteristics.  
6 Furthermore -- let me finish.

7 The issue doesn't exist to  
8 the same extent as the arguments for the  
9 amphiboles because analytically with TEM  
10 and selected area electron diffraction --  
11 the electron diffraction patterns of  
12 chrysotile are unique to chrysotile. So  
13 the electron diffraction pattern is enough  
14 to identify chrysotile because it is a  
15 unique -- it is unique to it regardless  
16 of fiber length, regardless of how it was  
17 processed.

18 Q. Okay. So if you have a  
19 fiber and you -- it's a five micron fiber  
20 and you don't see splayed ends and you  
21 don't see any curvature, does it end  
22 there or are you looking for something  
23 else?

24 A. If you're talking about a

1 single particle with how you described  
2 it, you would not -- if that's all the  
3 information you have, you couldn't  
4 conclude one way or the other whether it  
5 was asbestos or whether it was not.

6 Q. Well -- and I'm sorry. I  
7 asked an incomplete hypothetical.

8 If you have a particle, it's  
9 five microns long, it has an aspect ratio  
10 of 5 to 1 and it's a confirmed amphibole,  
11 it's a confirmed amphibole, in other  
12 words, you and I agree that it's an  
13 amphibole, okay, if you don't find  
14 curvature and you don't find splayed  
15 ends, with all that information, what's  
16 the next thing you're going to look for  
17 to try to confirm an asbestiform habit?

18 A. I go look for more  
19 particles. I would not -- you wouldn't  
20 be able to say one way or the -- either  
21 based on the information. You need more  
22 information, more particles. You need to  
23 look again. The methods require looking  
24 at populations of particles, and so to do

1       that you look at as many particles you  
2       can find that you analyze and looking for  
3       those telltale identification,  
4       morphological features that are unique to  
5       asbestos in order to identify.

6               Q.       Okay.   So in a bottle of  
7       baby powder, when you're trying to look  
8       for quote/unquote populations -- first of  
9       all, you would think that you have to  
10      look at populations every time; is that  
11      fair?

12             A.       Well, as you analyze the  
13      sample, you're looking at populations of  
14      particles.   You're looking in the  
15      microscope at thousands and thousands and  
16      thousands of microscopic particles.  
17      You're observing populations of particles  
18      the whole time.   What you're looking for  
19      are there amphibole or serpentine  
20      minerals within that powder that have  
21      morphological characteristics of  
22      asbestos.

23             Q.       Okay.   So in a bottle of  
24      baby powder that you test and you find a

1 tremolite particle that meets the  
2 counting criteria, you know it's  
3 tremolite, it doesn't have splayed ends  
4 and it doesn't have curvature, the only  
5 thing you believe you can do to confirm  
6 that it is asbestos or asbestiform is  
7 find another particle from that same  
8 bottle that does have those  
9 characteristics? Is that what you're  
10 saying?

11 A. You misstated what I said  
12 greatly.

13 Q. Well, I'm not trying to  
14 misstate what you said. I'm trying to  
15 figure it out.

16 A. First and foremost, the  
17 analytical methodologies for the  
18 determination of asbestos do not -- do  
19 not rely upon the use of a counting  
20 criteria. If you look at the EPA R93, if  
21 you look at ISO 22262, if you look at the  
22 OSHA documents, nowhere does it say to go  
23 in there and count 3 to 1 aspect ratio  
24 particles and call them asbestos. They



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1 do define fibers as 3 to 1, but fiber  
2 could be anything. That term is not  
3 specific to asbestos.

4 Now, the methods require you  
5 to make -- to analyze the samples, a  
6 minimum amount of material to be  
7 analyzed, and then if you -- and based on  
8 what you see, you draw your conclusions.  
9 If -- this is what I do. If I don't have  
10 enough data at the end of the analysis  
11 that I'm not confident -- let's say I saw  
12 an amphibole. If I wasn't confident  
13 whether or not it was asbestos or whether  
14 it was a non-asbestos amphibole, I would  
15 look at the sample more. I would do more  
16 work until I was confident that I knew  
17 what the morphological habit or habits of  
18 the amphiboles that were present in that  
19 sample. I don't want to -- I don't want  
20 to be in the world of ambiguity looking  
21 at the hypothetical one -- one fiber  
22 problem that I'm always proposed with by  
23 plaintiff attorneys.

24 Q. Well -- but -- and I'm

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1 not -- that's not fair. I mean, I'm not  
2 trying to denigrate you or act like  
3 you're some kind of jerk or something.  
4 I'm simply -- in this testing, we all  
5 know that most of the time there are not  
6 a lot of fibers found even when they're  
7 confirmed, even in instances where you  
8 with your obtuse, out there in the sky  
9 thing going on agree. Even when you  
10 agree, you agree that it's not a lot of  
11 fibers in a bottle of baby powder, right?  
12 I mean you agree with that?

13 MR. HYNES: I'll object.

14 Argumentative.

15 Go ahead.

16 MR. OLIVER: Well, your  
17 witness is insulting and I'm  
18 losing my patience.

19 THE WITNESS: I'm not being  
20 insulting.

21 BY MR. OLIVER:

22 Q. Go ahead. Do you agree with  
23 that or not?

24 A. I do not agree with how you

1 characterized what I do. I follow the  
2 methods. I look at particles. I go in  
3 and look at the samples myself screening  
4 looking for the amphiboles in order to  
5 assess the morphological features whether  
6 they are consistent with asbestos. In my  
7 work with Johnson & Johnson in their  
8 product samples, other than in the one  
9 sample we've already discussed, I've not  
10 found amphibole asbestos. The amphiboles  
11 I find have non-asbestiform morphology.  
12 There's no evidence of bundles. There's  
13 no evidence of splayed ends. There's no  
14 high-aspect ratio populations. The  
15 highest aspect ratio particles we  
16 encounter are typically not even  
17 amphiboles. They're minerals like  
18 Clinojimthompsonite and other -- and  
19 other biopyribole phases, which are all  
20 spelled out in my reports.

21 Q. With regard to a bottle of  
22 baby powder, Dr. Sanchez, what is --  
23 well, first of all, let me back up.

24 Do you believe, based on the

1 regulation upon which you rely, that  
2 examining the population of the fibers is  
3 a necessary step?

4 A. Yes. It's required for the  
5 determination of the morphology whether  
6 or not you're dealing with asbestos.

7 Q. In the context of a bottle  
8 of baby powder that is being tested, what  
9 is the population? Is it everything  
10 that's in that bottle or is it something  
11 else?

12 A. It can't be because there's  
13 no way to analyze the whole bottle. What  
14 you do is you analyze based on what you  
15 observe as you analyze it. Some cases  
16 you may see 20 particles. Some cases you  
17 may see five. Other cases you could see  
18 50, depending on the analysis. You're  
19 screening through looking for the  
20 amphiboles. When you find them, you  
21 assess the morphology as a whole and then  
22 arrive at your conclusions as stated in  
23 the methods. The population is dictated  
24 by what you observe. There's no -- you

1 don't know what you're going to observe  
2 until you analyze the sample.

3 Where I have ambiguity in  
4 the initial test results, I always do  
5 more work in order to overcome the  
6 ambiguity so I'm confident from a  
7 scientific perspective of what I'm  
8 looking at.

9 Q. And if any ambiguity  
10 remains, do you classify it as  
11 asbestiform or non-asbestiform?

12 A. If I had ambiguity, I  
13 would -- I would classify it as  
14 ambiguous. I wouldn't -- I wouldn't -- I  
15 wouldn't characterize it one way or the  
16 other.

17 Q. Do you agree with the  
18 following statement: The larger the  
19 particle gets, the easier it is to tell  
20 the habit of growth?

21 A. Yes.

22 Q. You mentioned a Payne  
23 article from 1987. Are you familiar with  
24 that article?

1 A. Yes.

2 Q. Okay. So it's something  
3 you've seen and reviewed in preparation  
4 for your opinions?

5 A. Yeah, I've reviewed it. I  
6 can't remember the first time I saw it,  
7 but I've seen it for many years. I've  
8 been aware of that article for many  
9 years.

10 Q. You're aware of who Fred  
11 Pooley is, correct?

12 A. I am.

13 Q. All right. You have relied  
14 upon Pooley's work in reaching your  
15 opinions in this case, correct?

16 A. Yes. Just to be specific,  
17 I've reviewed a report of his going to  
18 the Italian talc mine in the early 1970s  
19 as well as into I think it was the  
20 Hammondsville mine in Vermont and the  
21 characterization he did of the -- of the  
22 samples that he saw there.

23 Q. Have you relied on any  
24 Pooley -- well, you know that Pooley was

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1 at one time a J&J consultant, correct?

2 A. Yes, when he did the work in  
3 Italy and Vermont, he was working on  
4 behalf of Johnson & Johnson.

5 Q. Have you done any -- have  
6 you relied on any other work by Pooley?

7 A. I think the only other work  
8 I've seen as far as the litigation is  
9 concerned related to these topics would  
10 be letters he wrote providing samples to  
11 the FDA, for example. Nothing else comes  
12 to mind that I've seen as far as his work  
13 with Johnson & Johnson.

14 Q. In 2019 when -- I'm not  
15 asking you this to annoy you. I know you  
16 testified about it before. Okay?

17 In 2019 you agree that the  
18 FDA identified chrysotile asbestos in a  
19 bottle of Johnson's baby powder, right,  
20 according to the FDA, not according to  
21 you, correct?

22 A. Yes, the FDA did report  
23 that.

24 Q. And your employer RJ Lee

1       then did some subsequent tests to the  
2       control lot of that Johnson's baby  
3       powder, right?

4               A.       That's correct.

5               Q.       Just refresh my memory. You  
6       were not in charge of the follow-up tests  
7       related to that lot of baby powder, were  
8       you?

9               A.       No, I was not made aware of  
10      it for at least a week after it was done.

11              Q.       And there was a report  
12      prepared about why RJ Lee initially  
13      found -- also found some chrysotile  
14      asbestos in that control lot of Johnson's  
15      baby powder, right?

16              A.       Yeah, there were reports and  
17      an investigation conducted.

18              Q.       You didn't work on the  
19      investigation or the subsequent reports,  
20      correct?

21              A.       That's accurate.

22              Q.       Again, you testified  
23      recently in a trial that I was counsel in  
24      that you had a conversation with the



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1 analyst working in the room where RJ Lee  
2 claims there was contamination.

3 Do you remember that?

4 A. I do.

5 Q. And you identified that  
6 analyst by name, correct?

7 A. Well, which -- I know her  
8 name now. I believe when I was being  
9 asked about it I couldn't recall it. I  
10 had to refresh my memory after the trial.

11 Q. Well, what is her name?

12 A. Mary Walsh.

13 Q. How long did that  
14 conversation with Mary Walsh last?

15 A. I had a few conversations.  
16 After I reviewed the reports, I went and  
17 spoke with those that were involved. It  
18 was maybe 15, 20 minutes. There were --  
19 there were a few -- there were a few  
20 others that I was having the conversation  
21 with at the same time.

22 Q. Who were the others you were  
23 having the conversation with?

24 A. The project manager on it or

1 the one that was handling a lot of the  
2 analytical work was Ashley Sload from the  
3 management level. I was speaking with  
4 her and Mary Walsh primarily.

5 Q. What's her last name?

6 A. Sload, S-L-O-A-D.

7 Q. Anybody else that you talked  
8 to about this investigation?

9 A. They were the -- they were  
10 the primary ones. I know I had other  
11 just kind of comments and discussions  
12 with Bryan Bandli.

13 The other thing was I had --  
14 there was -- there was a gentleman Mike  
15 Wilmoth who was doing, I think, some of  
16 the monitoring of the like -- he was the  
17 one pulling the samples off bench tops  
18 and things like that. He wasn't  
19 analyzing, but he was collecting the  
20 samples. I had a conversation with him  
21 regarding -- because he was also the one  
22 that went into the air conditioning unit  
23 and exacted parts of the filter for  
24 analysis. I talked to him about that.

1           Q.       How did you document these  
2       conversations that you had with each of  
3       these people?

4           A.       I didn't make any formal  
5       documentation. It was my looking at  
6       that, trying to process what happened and  
7       understand the rationale and asking them  
8       questions and following up with questions  
9       I had to understand what had happened.

10          Q.       So if I -- you didn't take  
11       any notes?

12          A.       No.

13          Q.       You didn't draft any e-mails  
14       summarizing the results of your finding?

15          A.       No. The reports speak for  
16       themselves. I was just verifying and  
17       asking some questions that I had based  
18       off -- based on the reports.

19          Q.       And the reports themselves  
20       didn't answer those questions. That's  
21       why you had to go ask the people, right?

22          A.       Yeah, I wanted a better --  
23       yeah. I mean, I was looking for better  
24       understandings of some of the

1 descriptions in the reports.

2 Q. So what you went and found  
3 out was information that's not contained  
4 or not clear from the reports?

5 A. It wasn't that clear to me.  
6 I wanted to make sure I -- I fully  
7 understood what was being said.

8 Q. So, for example, in the  
9 report that was publicly released, Mary  
10 Walsh was not identified at all, correct?

11 A. I don't believe any of the  
12 specific technicians involved names were  
13 released. I believe there is -- there is  
14 meeting minutes, I think, of a meeting  
15 that happened after all the events and it  
16 identifies people by name in there. I  
17 believe her name's there, but as far  
18 as -- as far as -- I think it was being  
19 vague. They weren't putting anybody's  
20 name directly into the -- into the --  
21 those -- I'm sorry. I'm grasping on what  
22 to call them, but the reports themselves.  
23 It would be in the underlying  
24 documentation.

1           Q.       When RJ Lee did the -- after  
2       the thing that RJ Lee alleges was  
3       contamination and then it did some  
4       follow-up testing, you testified about  
5       these 155 tests that RJ Lee did, correct?

6           A.       Correct.

7           Q.       And those 155 tests were  
8       done to the control sample, is that  
9       right, or am I misunderstanding?

10          A.       What do you mean by control  
11       sample? I'm sorry.

12          Q.       Well, so there's the bottle  
13       that AMA and FDA got off the -- publicly.  
14       They got it publicly, right?

15          A.       The bottle -- well, FDA  
16       purchased it, I assume, and then supplied  
17       an unmarked bottle in triplicate or  
18       something to AMA.

19          Q.       Right. And RJ Lee tested  
20       some samples from that bottle, correct?

21          A.       I believe that's accurate.  
22       I would defer to my report where I laid  
23       this out in great detail so I wouldn't  
24       have to remember these finer points.

1                   Q.       Sure.   Sure.   And then RJ  
2       Lee also tested some retained samples  
3       from the bottler, right?

4                   A.       Meaning -- yes.   So the  
5       manufacturing point of the baby powder,  
6       there were retained lots that were the  
7       same retained lot, and then I think the  
8       lot that they had received previous and  
9       then the one afterwards were also sent in  
10      for analysis.

11                  Q.       And when RJ Lee did these --  
12      and I understand it wasn't all RJ Lee,  
13      but when these third-party testers did  
14      the tests, they were doing them all of  
15      either the bottle the FDA got or the  
16      retained sample from the manufacturing  
17      point, right?

18                  A.       I'd have to check with the  
19      testing by Bureau Veritas.   I believe  
20      they received the same material from the  
21      FDA that we did.   I don't -- I think they  
22      tested some other samples, but I don't --  
23      I don't recall how exactly it ties up to  
24      our tests.

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1           Q.       Now, FDA forced J&J to do a  
2 recall after the positive chrysotile  
3 asbestos finding, correct?

4           A.       I know that J&J did a  
5 recall. I don't know about force being  
6 applied. I don't think that's -- I don't  
7 think the FDA would appreciate that  
8 characterization, but I'm not speaking  
9 for them, but there was a recall, yes,  
10 but I don't know the deliberations  
11 between FDA and J&J on that.

12          Q.       And the recall involved more  
13 than 37,000 bottles of existing J&J  
14 products that were on the market, right?

15          A.       I don't remember the number,  
16 but there -- there's a statement about  
17 it, I believe, that was put out.

18          Q.       To your knowledge,  
19 neither -- well, to your knowledge, RJ  
20 Lee never tested any of those recalled  
21 bottles, correct?

22          A.       To my knowledge, no, I  
23 don't -- I don't know if any of those  
24 were sent in. I don't even know how many

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1       were received by J&J. I can't -- I can't  
2       speak to that at all.

3               Q.       And you've never seen any  
4       results from Johnson & Johnson where they  
5       tested even one of those bottles,  
6       correct?

7               A.       I don't believe I've seen  
8       any testing of a bottle that they may  
9       have received as part of their recall.

10              MR. OLIVER: I think that's  
11       all my questions for right now  
12       subject to anything that Kevin may  
13       ask.

14              MR. HYNES: I don't have any  
15       redirect.

16              MR. OLIVER: Okay. Give  
17       me -- give me a ten-minute break  
18       since we're towards the end of the  
19       day and let me make sure that I'm  
20       done and then we'll go back on the  
21       record and I'll say officially  
22       we're done; is that fair?

23              MR. HYNES: Sure.

24              (A short recess was taken at



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1 5:54 p.m. until 5:59 p.m.)

2 MR. OLIVER: I'm through at  
3 this time unless you guys have  
4 something. I'm good.

5 MR. HYNES: All right. Off  
6 the record.

7 (Whereupon, the deposition  
8 was concluded at 5:59 p.m.)

9 THE COURT REPORTER: Does  
10 everyone need to order a copy of  
11 the transcript?

12 MR. HYNES: Yes. I think we  
13 have a standing order.

14 MS. TURPIN: Yes.

15 (Whereupon, Exhibits P-1  
16 through P-22 were marked for  
17 identification.)

18

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## C E R T I F I C A T E

I, KATHLEEN A. ZERMAN,  
Professional Reporter, do hereby certify  
that prior to the commencement of the  
examination, MATTHEW SANCHEZ, Ph.D., was  
duly remotely sworn by me to testify to  
the truth, the whole truth and nothing  
but the truth.

I DO FURTHER CERTIFY that the  
foregoing is a verbatim transcript of the  
testimony as taken stenographically by me  
at the time, place and on the day  
hereinbefore set forth, to the best of my  
ability.

I DO FURTHER CERTIFY that I am  
neither a relative nor employee nor  
attorney nor counsel of any of the  
parties to this action, and that I am  
neither a relative nor employee of such  
attorney or counsel, and that I am not  
financially interested in the action.



-----  
KATHLEEN A. ZERMAN  
Professional Reporter  
Notary Public  
Dated: June 25, 2024

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New Jersey Rules Governing Civil Practice

Part IV, Rule 4:14

Depositions Upon Oral Examination

4:14-5. Submission to Witness; Changes; Signing

If the officer at the taking of the deposition is a certified shorthand reporter, the witness shall not sign the deposition. If the officer is not a certified shorthand reporter, then unless reading and signing of the deposition are waived by stipulation of the parties, the officer shall request the deponent to appear at a stated time for the purpose of reading and signing it. At that time or at such later time as the officer and witness agree upon, the deposition shall be submitted to the witness for examination and shall be read to or by the witness, and any changes in form or substance which the witness desires to make shall be entered upon the deposition by the officer with a statement of the reasons given by the witness for making them. The deposition shall then be signed by the witness. If the witness fails to appear at the time stated or if the deposition is not signed by the witness, the officer shall sign it and state on the record the fact of the witness' failure or

refusal to sign, together with the reason, if any, given therefor; and the deposition may then be used as fully as though signed, unless on a motion to suppress under R. 4:16-4(d) the court holds that the reasons given for the refusal to sign require rejection of the deposition in whole or in part.

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VERITEXT LEGAL SOLUTIONS

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